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ABSTRACT

Objectives of this assessment of Pennsylvania's vocational programs for the handicapped were to describe and evaluate the programs' impact and explore the local capability for offering vocational program services to the handicapped. Study methodology was guided by 23 evaluation questions representing five major study components: problems and needs, priorities, programs and activities, outcomes, and policies. Data sources were background information and existing documentation and files, interviews with Pennsylvania Department of Education officials, interviews with local education agencies, and a mail survey of projects. Pennsylvania's approach to funding vocational education programs for the handicapped was principally fiscal; state funding was distributed through an allocation method. The overwhelming majority of the programs were at the secondary level and represented continuation programs. The most frequent program activities were specific job skill training, individualized programming, general motivational skills training, and pre-employment services. Only about half of the activities represented "best practice." Little state-level interagency cooperation existed. Generally, the needs of program participants were met. Recommendations were made in these areas: definition of target population, method of funding allocation, exemplary project identification and dissemination, use of "best practice" techniques, enhancement of local program evaluations, interagency cooperation, and a stronger state education department leadership role. (Instruments are appended.) (YLB)

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FINAL REPORT

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ASSESSMENT OF THE IMPACT OF THE BUREAU OF VOCATIONAL EDUCATION'S HANDICAPPED PROGRAM

EXECUTIVE SUMMARY

Objectives

The purpose of this study is grounded in the Vocational Education Act of 1976 (P.L. 94-482). While this legislation made no major changes to the basic goals of vocational education, it substantially changed the mechanisms employed to further and enforce these goals. Particularly noteworthy in this regard are two specific areas where states have been given increased responsibilities for delivery of quality vocational education: states are required to provide a full range of vocational educational opportunities for the handicapped, and states are required to evaluate all vocational education programs at least every five years. This latter requirement is especially relevant to the present study and represents the mandate for local program evaluation conducted at the state level. RBS was selected to conduct such an evaluation of Pennsylvania's vocational programs for the handicapped, specifically covering the years from 1979-80 to 1981-82 inclusive. The evaluation was conducted during the 1983-84 year and was completed in June of 1984. The study objectives were to describe the programs, evaluate their impact, and explore the local capability for offering vocational program services to the handicapped. These objectives were aimed at satisfying the overall goal of providing useful evaluative information to the SEA for policymaking purposes.

Perspectives

Even with the recent interest, support, and programmatic effort, researchers have indicated that vocational education for the handicapped is still in its early stages of development and several needed areas of improvement have been identified. A needs assessment by the National Association of State Boards of Education (1979) identified several deficiencies, including: interagency cooperation, personnel preparation, funding methodology, service delivery and program options, program evaluation, and services to minority handicapped youth. Studies by researchers at the University of Illinois and Pennsylvania State University recommended improvements regarding involving parents in the vocational education process, expanding and refining administrative regulations, involving the business and industry sector, identifying exemplary practices, expanding teacher education activities, promoting state leadership skills, and coordinating service delivery systems (Phelps & Thornton, 1979). In light of these needs, it is alarming that funding for federal programs which focus on special need populations is declining. Under these conditions, systematic evaluations focusing on policy issues become very important, indeed. The present study represents such a systematic evaluation.

Methods

The methodology of the study was guided by a set of twenty-three evaluation questions which were based on SEA interests. These evaluation questions represented five major study components which served as a framework for the study in general, and for the analysis and reporting of problems and needs, priorities, activities and programs, outcomes, and policies.

Data Sources

Five data sources were utilized in the study: background information and existing documentation and files, SEA interviews, LEA interviews, and a mail survey. Extensive background information was collected including state plans, reports, evaluations, and project monitoring summaries. Files were collected for a total of 334 vocational education projects for the handicapped and were placed in a computerized management information system. Four SEA staff involved in the vocational program for the handicapped were interviewed. The LEA interviews consisted of two types: telephone interviews and on-site personal interviews. Thirty-nine local project staff were interviewed -- 27 via telephone and 12 via site visits and personal interviews -- out of a total sample of 93 projects. The balance of the projects in the sample (54) were surveyed by means of a mail questionnaire. The total sample of 93 projects was roughly representative of all project types but with the greater proportion consisting of more recent projects. An analysis plan related each of the evaluation questions to one or more of the data sources. Analyses were primarily of the descriptive statistical type.

Results

It was found that Pennsylvania's approach to funding vocational education programs for the handicapped is principally fiscal rather than programmatic. State priorities are more reactive than proactive in that they are based upon announced federal policies, with few changes. State guidelines for funding of vocational education programs for the handicapped appear to be fairly clear and generally meet the information needs of local education agencies. State funding is distributed through an allocation method rather than a competitive process. This has resulted in the distribution of over 11 million dollars in funding across 334 projects over the 3 year period under study.

In terms of activities and programs, the overwhelming majority of the programs funded by the state (over 80 percent) are at the secondary level and represent continuation programs funded year after year. Primary goals of such projects tend to be: acquisition of vocational skills/competencies, mainstreaming into regular vocational classes, development of pre-employment skills, and placement in full/part-time jobs. The most frequent activities of such programs are: specific job skill training, individualized programming, general motivational skills training, and pre-employment services. Only about half of the activities within funded projects represent what might be considered "best practice" in the field.

The projects funded appear to serve individual handicapping categories to the following extent: 25% learning disabled, 10% severely emotionally disturbed, 59% mentally retarded, and 6% physically handicapped. Little in the way of interagency cooperation exists presently at the state level with regard to the funding and administration of these projects.

Generally, the needs of the handicapped program participants were found to be met, with the majority achieving positive outcomes and about 50% of those graduating securing employment. It was not possible to determine what programs worked best for whom because of a general lack of objective evaluative evidence concerning project impact.

Less than half (about 40 percent) of the projects funded to provide vocational education to the handicapped indicated that they "definitely" or "possibly" could continue their programs without further state funding.

Issues and activities requiring further attention as indicated by this study seem to be strongest in the following areas: programmatic technical assistance, allocation of federal/state funds, exemplary program identification and dissemination, program evaluation and quality assurance, innovative programming, inter-program communication, interagency cooperation, and curriculum standards. A total of 18 specific recommendations concerning these areas were made and suggested for adoption by the SEA.

Significance

The current study provides a comprehensive description and analysis of vocational education services to the handicapped in Pennsylvania over a three-year period. The findings from this study will be helpful in reviewing state policy and procedures with regard to the vocational handicapped program. Accordingly, recommendations were made in a number of areas including the following:

- defining the target population
- method of funding allocation

- exemplary program identification and dissemination
- use of "best practice" techniques
- enhancing local program evaluations
- effecting interagency cooperation
- exerting a stronger SEA leadership role

Study recommendations also include procedures for designing and operationalizing an on-going management information system for handicapped projects. Thus, the study serves not only as an example of federally mandated vocational evaluation, but also provides useful specific findings on the implementation and effects of such projects within a major state.

Acknowledgements

The undertaking and successful completion of this evaluation study was made possible only through the concentrated efforts of a number of staff members at Research for Better Schools (RBS) and the cooperation and openness of a much larger number of vocational education professionals at the state and local levels across Pennsylvania.

While it is not possible to mention here all who contributed to this effort, a few of the primary contributors from RBS can be acknowledged. This work is indebted to Antonia Neubauer, Beth Woolf, Eliot Zeitlin, Tom Biester, and Keith Kershner who were instrumental in conducting site visits and interviews with both state and local vocational education professionals. Special thanks are owed to: Margaret Connelly and Eliot Zeitlin who worked on the computerized project data base; Tom Biester, who was integrally involved in all phases of the project from the initial proposal to helping in the presentation of preliminary results at the Pennsylvania Vocational Education Conference; and Keith Kershner, who cooperated and assisted in every phase of the project as he directed a companion study of vocational guidance projects. Several staff members at the Pennsylvania Department of Education also assisted in the successful conduct of the project. These include Carroll Curtis, Clarence Dittenhafer, Clara Gaston, and Bob Sheppard.

A note of thanks is also expressed to the many vocational educators in the field at the local level who gave of their time and effort to contribute to this study. Hopefully, their acknowledgement will come through recognition of the faithful reflection of their ideas within the contents of this report.

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Abstract

Title: Assessment of the Impact of the Bureau of Vocational Education's Handicapped Program

Submitted by: Russell A. Dusewicz, Research for Better Schools
Philadelphia, Pennsylvania

Total Funding: $20,000

Beginning and End Dates: October 15, 1983-June 30, 1984

Summary:

This evaluation study represented an effort to pull together a vast array of information and data to describe PDE's vocational education programs for the handicapped from the 1979-80 to 1981-82 school years and to provide evidence of their impact on the target population within the state. In addition, the study addressed the extent to which funded projects had developed or improved their program capacity to provide quality vocational education programs to handicapped students.

The conceptual framework for the study embodied five components: (1) problems/needs of the target population; (2) PDE priority solutions; (3) PDE-funded activities/programs; (4) program outcomes (impact and capacity); and (5) future directions/policy recommendations. The study workscope involved seven sequential interrelated steps: (1) study design/liaison with PDE; (2) review of existing documentation and files; (3) interviews with key PDE officials; (4) pilot study/on-site LEA personal interviews; (5) population study/mail survey; (6) sample study/LEA telephone interviews; and (7) analysis/synthesis/reporting of results.

The study had several significant outcomes. It described the distribution of over 11 million dollars for 334 vocational education programs for the handicapped over the three-year period under study and established a state-wide computerized data base of all funded projects which could be used for future research inquiries. It also took a critical look at the return on PDE's investment in vocational education for the handicapped in terms of the extent of the target population served and program effectiveness. Finally, it addressed a number of significant problems and issues through a set of specific recommendations for policy and procedural changes at the state and local levels. Among other areas, these recommendations dealt with: method of funding allocation, exemplary program identification, use of "best practice" techniques, enhancing local evaluations, effecting interagency cooperation, and exerting a stronger SEA leadership role.

Study results were presented in a final evaluation report. Plans for dissemination of findings include a brief executive summary distributed to relevant audiences throughout the state and presentations at state and national conferences.

I. BACKGROUND

This section provides an overall background for the study, including its purpose, a review of related research, and an overview of the balance of the present report.

Purpose of the Study

The purpose of the study is grounded in the Vocational Education Act of 1976 (P.L. 94-482). While this legislation made no major changes in the basic goals of vocational education, it substantially changed the mechanisms employed to further and enforce these goals. Particularly noteworthy in this regard are two specific areas where states have been given increased responsibility for the delivery of quality vocational education. First, states are required to provide a full range of vocational education opportunities for handicapped learners. In Pennsylvania, these opportunities are supported by programs in four areas: secondary, postsecondary, guidance, and teacher education. Each year funds are allocated to local education agencies throughout the state to operate these programs. A second noteworthy implication of P.L. 94-482 is the requirement for states to evaluate all vocational education programs at least every five years. All programs are to be evaluated in terms of planning and operational processes, student achievement, student employment success, and the effects of additional services. Moreover, these evaluations are to be designed to revise and improve programs administered by the state. To meet this obligation, the Pennsylvania Department of Education (PDE) issued a request for proposals to evaluate the 1979-80, 1980-81, and 1981-82 vocational programs for the handicapped. Research for Better Schools (RBS) was selected to undertake the evaluation study.

In order to meet the evaluation requirements to gather information to revise and improve programs, the study examined and analyzed the various types of vocational education programs for the handicapped that were sponsored by the Pennsylvania Department of Education from the 1980 through 1982 fiscal years. The study developed an extensive data base to describe these programs and sought to determine their impact on the handicapped population within the state. In addition, the study addressed the extent to which funded projects had developed or improved their capacity to provide quality vocational education programs to the target groups. The extent to which program effects were transferred to other schools and the ability to continue to provide services with diminished resources was also examined. One of the primary outcomes of the evaluation study is the comprehensive data base developed for all handicapped projects from 1980-1982 that can be used by PDE to make informed policy decisions in continuing program efforts in future years. This is particularly important in view of the anticipated diminution in federal and state resources available for all educational programs, including vocational education and special education.

Related Research

To properly understand the current study and its implications, it must be viewed in the context of its historical perspective and related research. This section discusses federal legislation and prior research contributing to this context.

Legislation

In the mid-1970s, educators and concerned citizens became increasingly aware of severe problems in providing vocational education opportunities for handicapped youth (e.g., Olympus Research Corporation, 1974; General Accounting Office, 1976; Phelps, et al., 1976; Levitan and Taggart, 1977). Among the significant problems noted were under-representation of handicapped students in regular vocational classes, an over-emphasis on prevocational or non-skills training instead of vocational skill training, concerns regarding equitable funding procedures, restricted occupational offerings, problems with state-level interagency coordination, and the lack of professional preparation of vocational educators in serving handicapped youth. This awareness set the stage for renewed national interest in expanding and improving vocational education opportunities for the handicapped. As a result of federal and state legislation, litigation, and the efforts of various advocacy groups, existing trends began to reverse. Section 504 of the Rehabilitation Act of 1973 (published in 1977) set requirements for non-discrimination on the basis of handicap that specifically applied to vocational programs. Public Law 94-142 integrated the concept of vocational education into its commitment to provide "free and appropriate public education" for all handicapped children. The law also required the development of an Individual Education Plan (IEP) that must include vocational objectives for all handicapped students in vocational education programs. The trend towards increased vocational opportunities continued with the passage of P.L. 94-482 which gave states the primary responsibility for administering vocational education, setting aside funding for the handicapped (i.e., 10 percent of basic grants), equally matching federal funds with state and local resources, and giving priority status to programs for the handicapped in their annual state plans.

Programs and Needs

In response to these mandates and the needs indicated by the cited research, states actively began to remedy existing deficiencies. For example, Griffin (1978) reported that more than 80 inservice and preservice training programs were initiated in nearly every state to train vocational and special education personnel to work with handicapped youth. The Pennsylvania Bureau of Vocational and Technical Education sponsored the development of an administrators manual for planning, developing, and implementing mainstreaming, self-contained, or cooperative work experience programs for special needs learners (Wircenski, Irvin, and Blake, 1981). In Pennsylvania's 1980-1981 State Plan for Vocational-Technical Education Programs, the provision of meaningful vocational education for the handicapped was the "number three" priority for program improvement. The state has been allocating approximately four million dollars a year to this end.

The recent report on vocational education by the Secretary of Education to the Congress (United States Department of Education, 1983) indicates that the enrollment of handicapped students in vocational programs increased substantially by the 1980-81 school year. These students comprised 3.3 percent of the total vocational education enrollment, a 96 percent increase over the number served in 1975-76. Most of these students (i.e., 74.7 percent) were served in mainstream vocational programs, with largest gains in business education and industrial arts. However, these increases must be viewed in the light that handicapped students represent 9.5 percent of the total public school enrollment (grades 9-12) and, as such, are still underrepresented in vocational education despite the significant gains.

Even with increased interest, support, and programmatic effort, several researchers have indicated that vocational education for the handicapped is still in its early stages of development and several needed areas of improvement have been identified. A needs assessment by the National Association of State Boards of Education (1979) identified several remaining deficiencies, including interagency cooperation, personnel preparation, funding methodology, service delivery and program options, program evaluation, and services to minority handicapped youth. A study by researchers at the University of Illinois and Pennsylvania State University recommended improvements regarding involving parents in the vocational education process, expanding and refining administrative regulations, involving the business and industrial sector, identifying exemplary practices, expanding teacher education activities, promoting state leadership skills, and coordinating service delivery systems (Phelps and Thornton, 1979). A national survey of individualized education programs for handicapped children revealed that only 7.8 percent of all IEPs contained short-term instructional objectives focusing on prevocational or vocational education (Pyecha, 1979).

In light of these needs, it is alarming that funding for Federal programs focusing on special needs populations appears to be declining

(Phelps, 1982). Compounding this development, Phelps notes that overall enrollments at the secondary level are declining, thereby reducing the capability of LEAs to generate funds through typical state aid formulas. These circumstances have important implications for the identification of exemplary, cost-effective practices to serve the continuing vocational needs of the handicapped population. Systematic evaluations focusing on policy issues become very important.

Evaluation Requirements

Following the passage of P.L. 94-482, several educators and researchers developed descriptive guides and procedural manuals to help states and localities interpret and implement the mandated evaluation requirements. The Education Commission of the States (1979), Foster (1979), and Datta (1979), described the evaluation roles and responsibilities of various groups and illustrated the relationship between evaluation, accountability, and planning according to Congressional intent. States such as Illinois, Ohio, and Vermont sponsored the development of guides for evaluating vocational education, several of which specifically focused on the handicapped (Albright and Markel, 1982; Wentling, 1978; Ghazalah, 1978; and Albright, 1982). Orr (1982) described information requirements and data sources for assessing vocational education programs. These sources suggest good frameworks for developing evaluation designs, illustrate special considerations in evaluating vocational education programs for the handicapped, and provide several examples of useful checklists and instruments that can be adapted in the conduct of evaluations that meet mandated requirements. Most of the state guides seem to recommend a self-assessment approach to evaluation emphasizing qualitative data collection supplemented by demographic and fiscal data. Cost-effectiveness models (e.g., Ghazalah) are somewhat difficult to implement. Discussions of experimental approaches to evaluation are rare. There is considerable disagreement over the definition of student outcomes of vocational education. Definitions range from the traditional notion of actual employment in the field of training to personal success in terms of each individual's specific goals (e.g., in Vermont). Program completion in such a case might be the "desired end" of a handicapped student's vocational program. For handicapped populations, however, the development of employability skills is probably the most frequent and reasonable vocational program goal.

While most of the evaluation sources described above are "how to" guides, reports of actual evaluation results are scarce. Typically, evaluation reports provide extensive documentation of enrollments and expenditures, but student impact is often ignored. For example, the "Impact for Handicapped Students" section of the 1982 Congressional Report on Vocational Education is limited to a few brief paragraphs on two exemplary programs in Wisconsin and California. Overall, little is currently known about the actual impact of the renewed initiative of vocational education for the handicapped.

Organization of the Report

The report is organized into five main chapters plus an appendix. Following this introductory chapter, there are additional chapters on methods, analysis, conclusions and recommendations, and dissemination. The methods chapter details the methodology and procedures utilized in carrying out the study, including the evaluation questions, data sources, timeline, and limitations of the study. The analysis chapter presents an analysis of the data and the results or findings of the study. The conclusions and recommendations chapter interprets the results for application to PDE policies and procedures, and sets forth recommendations deemed necessary for program improvement in keeping with the identified state needs and goals. The final chapter on dissemination describes the plan for releasing and disseminating the study results.

II. METHODS

Presented in this chapter is the methodology used in conducting the study. Included are the evaluation questions which served as the focus of effort for the study, the data sources used in obtaining the information needed for analysis, and the timeline within which the work was performed. A discussion of the limitations of the study is also provided.

Study Questions

The study organized and synthesized existing information on the state's program of vocational education for the handicapped and collected and analyzed additional pertinent information in order to assess the impact of PDE sponsored programs for the handicapped for 1979-80 through 1981-82. The study was designed in accordance with a five component conceptual framework illustrated graphically in Figure 1. This figure portrays the interrelationship between the various components of the study. The components themselves are operationally defined by the list of study questions presented in Figure 2. These evaluation questions and components represent RBS' interpretation of PDE's interest in the evaluation and constitute the objectives of the study. All questions are addressed in this report. However, the availability of both information and study resources posed limitations in some cases. The extensive list of evaluation questions indicates the wide scope of information which it was necessary to collect and synthesize during the course of the study.

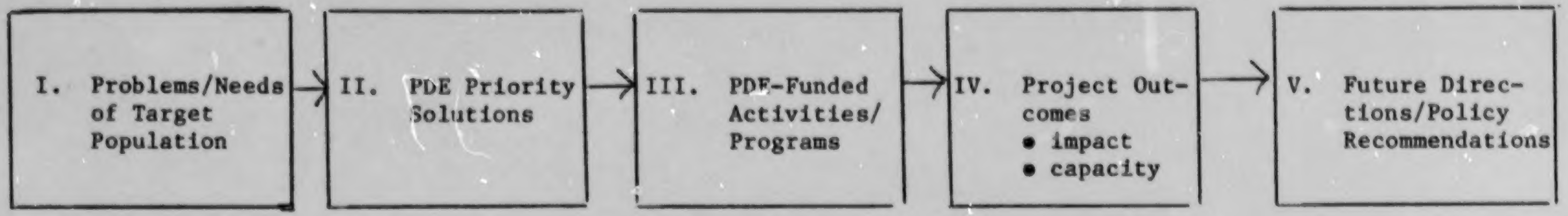
I. Problems/Needs of Target Population
II. PDE Priority Solutions
III. PDE-Funded Activities/ Programs
IV. Project Outcomes
• impact
• capacity
V. Future Directions/Policy Recommendations

Figure 1. Conceptual Framework for Evaluation Study of PDE's Vocational Education Program for Handicapped Populations.

Figure 2. Summary of Evaluation Questions, By Study Components

Study Component	Evaluation Question
I. **Problems and Needs:** Problems/Needs of Target Population	1. How extensive is target population in Pennsylvania?
	2. What are the special problems/needs of the target population?
II. **Priorities:** PDE Priority Solutions	1. What is the existing PDE approach to solving problems (i.e., stated goals, long and short-term objectives, guidelines)?
	2. What are desirable policies/practices for PDE to employ in order to accomplish goals?
	3. How were PDE priorities determined and validated?
	4. What are the relationships (i.e., commonalities and unique features) between the various PDE objectives?
	5. Do PDE guidelines meet the information needs of local education agencies?
	6. What is the current PDE funding approach?
III. **Programs and Activities:** PDE-funded Activities/Programs	1. What types of activities (i.e., projects) were supported by PDE during 1979-80 through 1981-82, by project category?
	2. What are the relationships between projects?
	3. What evidence exists that funded projects represent "best practice" in terms of services for handicapped youth (i.e., in relation to criteria such as IEP characteristics, goals/standards, individualization, accessibility, responsiveness to job market, opportunity, support services, personnel preparation, and resource utilization)?

Figure 2 (continued)

Study Component	Evaluation Question
III. Programs and Activities: (continued)	4. How are funds actually distributed relative to the target group and are the funds being utilized most effectively?
	5. To what extent is there inter-agency cooperation (e.g., Bureau of Vocational Rehabilitation, Bureau of Special Education, Research Coordinating Unit) in terms of funding and administering vocational education projects for the handicapped?
IV. Outcomes: Project Outcomes	1. Have the needs of the target population been met?
	2. Are needs met because of PDE-funded projects or other factors?
	3. What is the evidence of project impact for each project and for specific types of projects?
	4. What programs work best for whom?
	5. Have projects developed the capacity to continue to meet the vocational needs of handicapped students?
V. Policies: Future Directions/ Policy Recommendations	1. What issues or activities require further attention?
	2. What recommendations for future policies/practices can be made?

Figure 2 (continued)

Study Component	Evaluation Question
V. **Policies:** (continued)	3. What should be PDE's role in carrying out their function with regard to -- leadership? -- funding? -- dissemination of information? -- technical assistance/staff development? -- monitoring/evaluation/quality assurance?
	4. How can PDE improve in carrying out its current role regarding the dimensions noted above?
	5. What criteria should PDE employ in funding future programs for the handicapped?

Data Sources

Four data sources used to obtain the information needed to address the study questions. These data sources were: existing documentation and files, interviews with key PDE officials, on-site telephone interviews with LEAs, and a mail survey of projects. Each data source is briefly described below.

Existing Documentation and Files

A wealth of documentation on vocational education of the handicapped is available from PDE. This documentation includes goals, objectives, funding, procedures, impact, and operations of vocational education programs for the handicapped. Some of the specific documents obtained and reviewed for this study are listed in Figure 3. Such information serves both as an important tool for providing a comprehensive orientation to vocational education services for the handicapped in Pennsylvania as well as providing direct answers to the evaluation questions posed as part of the study.

For each funded project, PDE maintains a permanent contract file which contains the project proposal, audited expenses, and any correspondence related to the project. The PDE staff who monitor the various projects also keep files which duplicate some of this information. Staff files are discarded after a few years, or when there is a PDE staffing change. In addition, the PDE vocational offices keep files for their regions (East, Central, and West) which contain project proposals and monitoring reports. These project files are the most comprehensive data source available, since

Figure 3. Existing Documentation Reviewed

1. Pennsylvania VEA Funds, Estimated Project Expenditure Report (PDE, 1984).
2. Vocational Education Guidelines for the Application of Federal Funds (PDE, 1977, 1978, 1980).
3. Pennsylvania Vocational Education Management Information System Report (PDE, 1980, 1981, 1982).
4. 1983 Pennsylvania Vocational Education Hearings Summarization (PDE, 1983).
5. 1983 Pennsylvania Advisory Council on Vocational Education Annual Evaluation Report (PACVE, 1983).
6. Excerpts from PACVE Annual Evaluation Reports for 1979, 1980, 1981, and 1982.
7. Pennsylvania State Plan for Vocational Technical Education Programs 1983-1987 (PDE, 1982).
8. Excerpts from 1980-1981 State Plan (PDE, 1980).
9. Vocational Education Report by the Secretary of Education to the Congress 1982 (USDE, 1983).
10. Project summaries for handicapped for 1979-80, 1980-81, and 1981-82 (PDE).
11. Vocational Education, State Programs, and Commissioner's Discretionary Programs (Final Regulations for Education Amendments of 1976) Federal Register, Vol. 42, No. 191, P-53822-53891, October 3, 1977.

all projects are represented. Project files were thus important for answering questions which required input from all projects, but they were limited to very specific information (e.g., funding level or project objectives), to the exclusion of important areas such as impact on student development.

The three types of files (contract, staff monitor, and field office) were carefully reviewed, and the PDE official contract files were selected for use in the study. Using permanent contract files required scanning all vocational files to find the handicapped projects needed. The decentralized field office files offered no relative advantage over the PDE files, since the monitoring reports, which are kept only in field offices, were found to contain no useful evaluative information.

Project files were assembled for the handicapped projects funded and conducted in the 1979-80, 1980-81, and 1981-82 school years. This vast array of material was processed in two ways to add to its utility. First, many of the files were perused to gain familiarity with the projects as they are represented by file information. Then, a project file data base was designed to extract key information for further analysis. The data base specifications appear in the Appendix. In addition to project identification information, the data base included coded data on project expenditures, funded activities, objectives, and participants. The data base was operationalized on a microcomputer system.

PDE Interviews

Key PDE staff members with responsibilities related to vocational education for the handicapped were identified for in-depth interview by project staff. These PDE personnel were interviewed using a structured interview guide covering all program issues related to the present study (see Appendix). Items related to the major study questions were included in the interview guide. Figure 4 lists the PDE personnel interviewed, the interview dates, and the interviewers.

LEA Interviews

Observations of projects in action and discussions with project personnel were built into the study design as the major source of in-depth information. The initial design called for 3 site visits and 21 telephone interviews. A revision increased the interview pool to 31 projects, with up to 8 slated for site visits. The actual number attempted was later revised to 45, of which 39 (12 personal and 27 telephone interviews) were completed, representing an 87% response rate. The composition of this interview sample and the survey completions are described in Figure 5. In general, projects in the eastern part of the state were given preference for site visits for logistical reasons. More recent projects were given priority over older ones to minimize problems due to project staff turnover and because the majority of programs funded represented continuation efforts.

These interviews resulted in a richer, more qualitative data base than that of the mail survey questionnaire. For example, the interviews explored issues such as exemplary practices, effects on capacity-building, and quality of program components through probes and branching questions which were not practical or feasible in the paper-and-pencil mail survey instrument.

It was intended that at least ten percent of all funded projects would be included in the in-depth interview sample. It should be noted that

Figure 4

PDE Interviews

	Project Type	PDE Staff	Interview Date	Interviewer
1.	Handicapped secondary	Clara Gaston	February 15, 1984	Biester
2.	Handicapped post-secondary	Robert Sheppard	February 15, 1984	Zeitlin
3.	Overall	Carroll Curtis	February 15, 1984	Biester
4.	Overall	Clarence Dittenhafer	February 15, 1984	Kershner

Figure 5

LEA Interview Completions

Program Category	Interviews Attempted	Interviews Completed	Percent Completion
Secondary	36	32	89%
Post-Secondary	5	3	60%
Staff Development	3	3	100%
Guidance	1	1	100%
Total	45	39	87%

multi-year, carryover programs were considered as single programs and were analyzed as such. Carryover programs prior to the 1979-80 school year were not considered. In order to insure that the sample was representative of the total group, programs were selected on the basis of certain stratified categories. These included, to the extent possible, such variables as: funding year, program category, geographic region, program size, urbanicity, and funding level.

The final telephone interview reflected the content of model forms used in prior studies as well as information gathered in the preliminary steps of the current evaluation study. In addition, questions regarding the development of program capacity were incorporated. Sample personal and telephone interviews are provided in the Appendix. Guides were developed for both personal and telephone interviews, and these also appear in the Appendix. Telephone interviews took approximately one hour each, while site visits were given a half-day for interview and observation. In all, 87 percent were completed successfully. Four additional telephone interview sites were contacted, but interviews couldn't be completed because relevant project staff were unavailable.

Mail Survey

It was believed important, and relatively inexpensive, to obtain at least minimal data directly from all participating programs. In order to accomplish this, a brief mail survey was administered to all projects not scheduled for either telephone or personal interviews that were funded during the study time frame. Although the depth of information was somewhat limited, data from the mail survey provided a comprehensive overview of some important issues. The mail survey data were intended to supplement existing records and documents, and to provide a broader base for interpreting personal and telephone interview data and for generalizing to the funded program population as a whole.

Several pre-existing questionnaire forms had been used for similar purposes by other states and researchers, including those developed by Albright (1982), Parker (1979), and Wentling (1978). These forms had included short answer and rating scale items. Final content for the mail survey was determined largely by the initial PDE interviews and pilot study site visits, and items from existing questionnaire forms. A sample mail survey form is provided in the Appendix. Self-addressed, stamped envelopes were included in the mailing. At least one follow-up mailing was conducted to minimize non-response as well as several telephone follow-ups. Return rates for the mail survey are shown in Figure 6.

Figure 6

Mail Survey Completions

Program Category	Surveys Sent	Surveys Returned	Percent Completion
Secondary	73	54	74%
Post-Secondary	0	0	—
Staff Development	0	0	--
Guidance	0	0	--
Total	73	54	74%

Analysis Plan

The study questions and data sources described above provided the basic ingredients of the study's analysis plan. Each question was to be answered using the information from one or more data sources as depicted in Figure 7. It was intended that the simplest, most direct answers be formulated. Extensive statistical analyses were not planned. Most questions could be addressed by synthesizing interview results and/or using simple descriptive analyses of project files.

Project Timeline

The proposed timeline of project activities began in October 1983 and ended June 1984. Since the project was not actually funded until January 1984, some timeline changes were necessary, as indicated in the Interim Progress Report (April 15, 1985). The revised timeline specified January and February for planning and data collection instrument development, March through May for data collection, and June for analysis and reporting. This schedule was followed in practice, with minor deviations which did not hamper the timeliness of the study.

Limitations of the Study

There were several factors which did limit the study's effectiveness and should be kept in mind while considering the findings and recommendations presented in the following two chapters. First, the resources available for conducting the study were quite modest -- less than $20,000. This level of resources constrained the person-time that could be devoted to any

Figure 7

Analysis Plan and Data Sources

Evaluation Questions	Data Sources			
	Existing Documentation and Files	PDE Interviews	LEA Interviews	Mail Survey
I. Problems and Needs				
1. Extensiveness of target population	✓			
2. Special needs/problems		✓	✓	✓
II. Priorities				
1. Existing problem-solving approach		✓		
2. Desirable policies/practices	✓	✓		
3. Determination of priorities		✓		
4. Relationships	✓	✓		
5. Adequacy of funding guidelines			✓	✓
6. Current funding approach	✓	✓		
III. Activities and Programs				
1. Types of activities supported	✓			
2. Project relationships			✓	✓
3. Extent of "best practice"			✓	✓
4. Distribution and use of funds	✓			
5. Interagency cooperation		✓	✓	✓

Figure 7 (continued)

Analysis Plan and Data Sources

Evaluation Questions	Data Sources			
	Existing Documentation and Files	PDE Interviews	LEA Interviews	Mail Survey
IV. Outcomes				
1. Extent of needs satisfaction			✓	✓
2. Funded projects vs. other factors			✓	✓
3. Evidence of project impact			✓	✓
4. Program effectiveness			✓	✓
5. Extent of capacity-building			✓	✓
V. Policies				
1. Issues for further attention		✓	✓	✓
2. Recommendations for future policies		✓	✓	✓
3. PDE's future role and functions		✓	✓	✓
4. PDE role improvements		✓	✓	✓
5. Suggested future funding criteria		✓	✓	✓

project task. Second, in the face of modest resources, there were a large number of handicapped projects -- 334. These were spread across three fiscal years and three project types; thus, nine categories of projects were included in the study. Each category theoretically could have been treated separately, but practicality would not permit it. Third, the projects were conducted from 1979 to 1982, while the evaluation field work took place in 1984. This time difference undoubtedly affected the validity of the interview responses. Those interviewed may have had difficulty in retrospectively distinguishing the project year under study, or worse, the most appropriate interviewees may have left the school district by the time the evaluation took place. Finally, in light of the limited study resources, some dependence on already existing data was necessary. PDE was able to supply data which met this need for may of the study questions, but one area was found to be deficient -- program outcomes. Outcome, or impact, information was rarely available on individual projects. This limited the analyses and conclusions which could be conducted and drawn in this area.

III. ANALYSIS

The analysis chapter reports the results of the evaluation study. Major findings are organized and discussed in accordance with the framework of evaluation questions presented in the previous chapter (see Figures 1 and 2). The evaluation questions, and hence the sections which comprise this chapter, are grouped into five general areas: problems and needs, priorities, activities and programs, outcomes, and policies. Evaluation questions are addressed within each grouping as completely and as concisely as possible. Answers to these questions are in some cases necessarily limited by the quality and completeness of the data available.

Problems and Needs

The problems and needs of the target population set the stage for the balance of the evaluation or study questions.

Question 1. How extensive is the target population in Pennsylvania?

Any question regarding the extent of the target population in Pennsylvania is difficult to answer because each of the different data sources available give widely disparate estimates. Nationally, handicapped students represent about 9.5 percent of the secondary school population, based on 1981 statistics. This percentage is reported to be rising. At the end of the 1982 school year, the percentage reported in Pennsylvania was between 12% and 13%.

To define the target population operationally as that group of handicapped students for whom vocational education is appropriate still permits several interpretations. One would be that the number of handicapped students in vocational education should approximate the proportionate number in the total population. A second would suggest that vocational education is particularly appropriate for the handicapped who are less likely to go on to college, and thus vocational education and concrete learning are good ways to teach abstract skills to this group. Following this line of reasoning, the number of handicapped students should exceed the proportionate number in the total population. A third interpretation represents the pervasive attitude among vocational educators that handicapped students are less likely to get into programs involving physical requirements, so fewer handicapped students should be expected in vocational education. PDE, of course, has no official policy with regard to any of these interpretations.

Different reports indicate that between 11,000 and 18,000 handicapped students participated in vocational education in 1981-82. The former figure is derived from the accountability report of the State Advisory Council for Vocational Education in its accountability report, while the latter figure comes from the Vocational Education Management Information System (VEMIS). If the figure of 18,000 is used, this represents a 55% increase in the number of handicapped students in vocational education over the four year period from 1978-1982. This figure also represents about 3.9% of the the total secondary school population, and about 31% of the handicapped population, based on an estimate of 55,000 handicapped secondary school students. About 38.6 percent of regular students participate in vocational education. Handicapped students in 1981-82 represented 10% of the total vocational education enrollment. This compares favorably with the 4.3% national figure. Still, assuming these figures are correct, the handicapped are slightly under-represented given expectations.

It should be noted that no attempt has been made in any of these estimates to separate the number of handicapped served by federal vs. non-federal supported programs. Undoubtedly these percentages would be greatly affected by such an analysis.

Who are the participants in the vocational education programs for the handicapped? This question addresses another aspect of the extent of the target population in Pennsylvania. Based on estimates from VEMIS, the make-up of the vocational education handicapped population is as follows: 25% learning disabled, 10% SED (socially and emotionally disturbed), 59% mentally retarded (both educable and trainable), and 6% physically handicapped. About 41% are reported to be in mainstreamed programs, while 59% are enrolled in separate programs. These estimates are partially corroborated by results of the present study's mail survey as indicated in Table 1. This table shows percentages of programs serving various handicapping conditions and percentages of students from each category served.

Data from site visits and interviews reveal that in many cases the handicapped vocational education enrollment is determined at local sites through the IEP process. Several sites indicated that they served all handicapped students referred to them by study teams. Others noted limitations regarding the number of slots available to handicapped students. Still others indicated that the students themselves and the study team decide whether or not vocational education is appropriate.

Table 1

Program Services by Handicapping Condition

Handicapping Condition	Percent of Programs Serving	Percent of Students Served
EMR	74%	46%
TMR	28%	13%
LD	54%	28%
SED	35%	10%
Other	31%	3%

Question 2. What are the Special Problems/Needs of the Target Population?

Project proposals, on-site and telephone interviews, PDE interviews, and other documents served as data sources for addressing this question.

Prior to recent federal and state legislation, handicapped students traditionally were actively discouraged from participating in vocational education (see enrollment data). Thus, initially, set-aside funds were needed to support such programs. Now the overarching state goal is to mainstream students whenever possible. A major need identified in connection with this goal is to enable such mainstreaming to occur. Related to this is a need for support services to improve the mainstreaming process. Significant staff development is also needed for regular vocational teachers with respect to handicapped student background information, attitudes, and so forth. Handicapped students need more special support and individual attention beyond regular programs. This would include special counseling, remedial tutoring, more time to learn, and in-shop support. Several people interviewed at the local level indicated that handicapped students, in general, cannot survive in regular vocational programs without this extra support. Also indicated as needs were factors related to curriculum methodology, for example, individualization, task analysis, and remedial programs. Teacher needs were thought to be substantial. Teachers need to be creative, flexible, and adaptable. Attitudes are also a big problem, both at the classroom level and at the administrative level.

Several sites indicated that a major need exists for pre-vocational programs, where students can develop appropriate awareness, attitudes, and habits regarding the world of work. These kinds of programs are not encouraged under current state regulations. Other sites noted needs with regard to co-op programs. These included job development, placement, and follow-up. It was noted that while sites can train a handicapped student with job skills, they need, additionally, to work with employers with regard to attitudes and expectations. There is also a need for follow-up with graduates once they are placed.

Work experience opportunities are also a major need, as with regular vocational education programs. However, handicapped students especially need hands-on work experience, either through co-op or in a shop. There are also needs with regard to employment, drop-outs, and attendance as with regular students. Vocational programs need to be more motivating. Accessible facilities also represent a major need for the handicapped as well as appropriate equipment and adaptations.

Finally, many of those interviewed indicated a major need also exists in terms of the dollars available to support a vocational education program for the handicapped.

Priorities

Facing the identified problems and needs of the target population, the PDE has assigned priorities to certain solutions. These are represented in state policy with regard to vocational education, state regulations, and funding guidelines. Study questions relating to these priority solutions are discussed below.

Questions 1 and 2. What is the existing PDE approach to solving problems? What are desirable policies and practices for PDE?

Vocational education projects for the handicapped over the years have addressed the state goals for vocational education (see Appendix), as have other funded vocational projects. Table 2 shows the extent to which such projects have been committed to each of the state goals during each of the years reviewed in this evaluation study. As can be seen from the table, the overwhelming majority of programs are grouped under goal #8, expanding opportunities for the disadvantaged and handicapped.

The PDE approach to solving problems of vocational education for the handicapped may be considered to have been documented in the goals and subgoals for funding for handicapped vocational education programs. While these statements provide some indication of the PDE approach, in-depth interviews with key PDE officials and local program staff provide a more analytic view of this approach. From this latter viewpoint, it would appear that the PDE approach is more fiscal than programmatic. One person interviewed indicated that "they throw money at a problem in order to satisfy the advocates." Another claimed that all programmatic decisions are made at the local level and not by the state: "local people define the problems and solutions, but they don't have the capacity to deal with the problems without federal and state dollars." Some of those interviewed felt that the state currently has no real commitment to vocational education for the handicapped: "The dollars supporting these programs are federal, matched by LEA funds, and PDE simply monitors the federal mandates." Moreover, the PDE approach appears to come from funding categories in the legislation. That is, "handicapped/disadvantaged" exists

Table 2

Projects and State Vocational Goals

Projects Goals	1979-80		1980-81		1981-82		Total	
	#	%	#	%	#	%	#	%
I. Vocational skill development	10	9%	4	3%	8	6%	22	6%
II. Adult and post secondary	5	4%	5	4%	4	3%	14	3%
III. Alternative programs	3	3%	7	5%	9	7%	19	5%
IV. Articulation across levels	2	2%	2	1%	0	0%	4	1%
V. Understanding education and career options/ placement	5	4%	1	1%	0	0%	6	2%
VI. Equal educational opportunities	2	2%	1	1%	0	0%	6	2%
VII. Professional inservice programs	0	0%	1	1%	3	2%	4	1%
VIII. Expanded opportunities for disadvantaged/ handicapped	84	76%	113	84%	112	82%	309	81%
TOTAL	111	100%	134	100%	136	100%	381*	100%

* Most projects had more than one goal.

as a funding category, so PDE has a "handicapped/disadvantaged" person on staff to coordinate and monitor it. View this in contrast with a potential alternative approach of assigning responsibility to operational staff; that is, permit areas of the department which relate to special education to monitor vocational education grants for the handicapped and Chapter 1 staff to monitor grants for the disadvantaged. Similarly, in its current configuration, handicapped vocational education is divided up further into post-secondary, guidance, disadvantaged, and secondary (paralleling the funding categories), all with different people responsible for them.

Prior to federal and state legislation in 1976-77, most of the vocational programs for the handicapped consisted of pre-vocational activities (e.g., assessment, work adjustment). After such legislation, the emphasis moved toward skill training and mainstreaming of handicapped students into regular vocational programs. According to current guidelines, vocational programs are not supposed to support pre-vocational activities, though many still exist and many more wish that continued support for pre-vocational activities would be forthcoming. PDE has not changed its basic position since 1979-80. That is, the LEAs primarily set the priorities for the vocational education programs for the handicapped.

There currently exists a strong feeling among PDE staff that the PDE approach should be of a capacity building nature. That is, funds should be used to build local programs towards a capacity for mainstreaming. Given this orientation, there are two principal ways to support it: a consumptive approach and a capacity building approach. Following a consumptive approach, funding would be made available for things like perpetual staff development, and ongoing program operations. Capacity building would require attention to teacher attitudes, facilities, upgrading teacher skills, and materials and methods. Based on the assumption that capacity is finite and can be reached, this may be the area to focus attention on initially. To some extent, LEAs have used program monies for capacity building, particularly with regard to facilities, although most funding is spent on program operations.

PDE's role with respect to the funded programs is usually one of problem solver of compliance or fiscal concerns, rather than programmatic concerns. There is a strong feeling that the current PDE role should be more in the area of technical assistance, emphasizing programmatic concerns. PDE also focuses almost exclusively on compliance rather than quality assurance. A strong feeling exists that PDE should focus more on assuring quality in the operation of local programs. Moreover, monitoring reports compiled by PDE and regional offices contain little useful information on local programs. While there may be utility in having monitors visit and regularly communicate with local programs, documentation on these visits and communications is of little value in its present form. One interviewee felt that compliance visits were only useful as a social function.

Although the state funds evaluations of programs, these evaluations at the local level are not in-depth. In addition, final reports are not required of projects. This lack of final reporting fosters a lack of accountability. Some LEAs assume that the dollars will always be there, so they don't have to be accountable, according to some interviewees. Many interviewees recommended instituting substantive reporting requirements.

Other recommendations stemming from PDE and LEA interviews included specification of a state role in dissemination of information on vocational education for the handicapped, identification and publicity for exemplary programs and practices, and instituting networking among the projects which have been established.

Questions 3 and 4. How are priorities determined and validated? What are the relationships?

As noted previously, the state education department disposes of federal funds for vocational education of the handicapped, the locals set priorities, and the school boards seek or want funding from the state. The state plan outlines the types of activities that can be supported and PDE doesn't add to or change the federal priorities. One respondent to the interviews said "It doesn't make any sense to prioritize goals at the state level, since, with entitlement, it doesn't matter anyway."

A new state plan is developed each year. Program people provide input to it but have a relatively minor role in its contents. The plan proceeds through staff to section heads to division chiefs to the bureau director. The State Advisory Council for Vocational Education has a role to advise. It submits an annual report of recommendations. This state advisory council usually doesn't recommend on handicapped issues each year, although there were recommendations during years included in the current study. For example, the state advisory council recommended a special education vocational education coordinator, and had several other recommendations during the 1982-83 program year. In addition, the Pennsylvania Association for Retarded Children (PARC) and the Pennsylvania Association for Vocational Education for Special Needs Pupils (PAVESNP) provide testimony at hearings, and that is taken into account in developing the state plan. Civil rights reports are also taken into account.

Questions 5 and 6. Do PDE guidelines meet the information needs of local education agencies? What is the current PDE funding approach?

Based on interview data, the consensus from local programs is that information needs regarding applications for funding are being met, and that locals are familiar enough with the application process to be less demanding in this regard. Locals can request help from regional offices and they do so when needed. The general perception is that the regional offices provide satisfactory help with regard to requests for aid from the locals. There is a perception on the part of some state department of education staff that LEAs request help more frequently than desirable, and they fear that this may encourage dependency.

As far as the information needs of locals in other areas is concerned, the information coming from PDE was not felt to be sufficient. For example, data collection and MIS requirements were perceived by the locals as generally not clear. These requirements appear to locals to change too frequently and the reports based on such information are viewed by them as being hard to interpret and use, too late, and containing the wrong types of information to be reported to programs. Local programs want good and up-to-date information, and would like to see useful evaluation data. Local programs also report that they need information on promising practices. They feel that there is no dissemination network or sharing among funded programs in this regard. Several local program personnel suggested that they would like to see an annual meeting or two to discuss viable strategies for meeting peculiar local situations and needs in this and related areas.

Some problems were reported by locals with respect to turnover in LEA staff assigned as federal coordinators, and the effect of this upon operation of local programs.

With regard to technical assistance provided from regional and central office program personnel, the perception of LEAs is that the quality of assistance varies from person to person. Some personnel are extremely helpful and some are not.

With respect to the PDE funding approach, PDE and LEA interviews indicate that many believe there should be more direction with regard to the PDE funding approach, and more clearly defined priorities. Such PDE funding should be aimed at capacity building, so that if the dollars received for support of such programs are cut, then the LEAs can deal with the problems based on capacity that has already been developed and can remove themselves in many ways from dependence upon the receipt of external funds.

PDE does not have leeway with regard to competitive funding for support of vocational education for the handicapped, except in teacher education and research and evaluation. The allocation approach, rather than the project method, is required by legislation. The perceived advantage of the allocation method is that all schools can participate. Schools don't have to be particularly aggressive or sophisticated with regard to proposal preparation in order to receive funding. This prevents politically influential districts from getting all of the funding dollars. Such a broad based funding approach has much to recommend it. The disadvantage of the allocation method is that funding and project development can become casual over time, due to lack of accountability and lack of incentives for developing and operating quality programs. The allocation method takes something away from the state leadership role in this area, some interviewees felt.

The project method has been tried with other components. Several problems exist with this method. Initially, there are often an insufficient number of applicants. This method creates a lot of paperwork and effort surrounding the proposal review process.

Much negative feedback was received from the local people interviewed regarding the funding approach, particularly with regard to the timing. Many of those interviewed claimed the funding is received too late, and that they don't know if they will be continued from year to year or the amount of funding upon which they can depend. There were also complaints that there were not enough funds for placement and for follow-up activities. There were also perceptions of inequitable funding, with too large a share of the funding going to urban areas. Some alternative suggestions were offered with regard to changing the funding to a two year cycle.

The Vocational Education Act affects the amount of money and the approach to funding. For entitlement formulas this involves criteria such as the percent of economically depressed, high unemployment, emerging manpower needs, relative number of low income families, and relative financial ability of the district.

PDE staff interviewed indicated that they did't like the funding approach, either, because it doesn't appear to foster quality. They would rather see the funding as a competitive process. They recognized that the distribution of funding might not be viewed as equitable if it were determined on the basis of quality, but felt that the way to insure quality is to institute competitive funding as well as accountability and monitoring. They believed that this would lead to a balance between equity and quality.

The qualifications for funding for monies that are part of the 10% set-aside include the following. Each student much have an IEP. Each student must be placed in the least restrictive environment. Each student must have equal access to regular vocational education. There must be cooperation between vocational education and special education staff. The handicapped must be diagnosed by a qualified physician and/or psychologist. Funding must be used as excess costs; that is, costs over and above that of the regular program. There must be assurances that handicapped students cannot otherwise succeed in a regular school program. In addition, the dollars must be used for vocational instruction or services to enable success in a regular vocational program. Pre-vocational programs or activities are not appropriate. Based on site visits and interviews at the local level, for the most part, compliance was observed with the above qualifications, though often at a superficial level.

Activities and Programs

The study questions addressed in this general area involve the types of activities and characteristics of programs funded by the Bureau of Vocational Education under the vocational education program for the handicapped.

Questions 1 and 2. What types of activities are funded by PDE? What are the relationships between projects?

The types of activities and the type of orientation that a particular project has is determined largely by the category in which it is funded. All projects for the three fiscal years under the study were identified from the PDE contract files and sorted under program category. The number of projects funded by category and by fiscal year are presented in Table 3. As can be seen in the table, a total of 334 projects were identified for the three fiscal years. The vast majority of these programs were funded in the category of "handicapped secondary." These projects are funded through entitlement, or through the allocation method. They constitute approximately 82% of the total number of projects funded over the three-year period. In addition, they represent an increasing proportion of the total number of projects being funded across each of the three years.

Table 4 shows the numbers of new projects, by program funding category, funded for each of the fiscal years under study. As can be seen in the table, a total of 78 new projects were funded during the three-year period. As such, Table 4 represents a subset of the total number of projects presented in Table 3. Again, the great majority of programs fall into the "handicapped secondary" category. A total of 23% of the total number of projects funded over the three-year period represented new projects. This indicates that the largest proportion of projects being funded each year are continuation projects.

Data were gathered on the goals of the projects and the types of activities that they represent by means of a mail survey, and these data are depicted in Tables 5 and 6. Table 5 indicates that the largest number of projects reported one of their primary goals to be the "acquisition of vocational skills/competencies." Only 4% of the programs indicated "staff

Table 3

Projects Funded by Program Category

Program Category	1980	1981	1982	Total
2-2 H/C Secondary	68	100	105	273
2-1 H/C Post Secondary	10	14	13	37
3-5 H/C Guidance	10	6	2	18
3-6 H/C Curriculum	0	0	0	0
3-7 H/C Staff Development	0	4	2	6
Total	88	124	122	334

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Table 4

New Projects Funded by Program Category

Program Category	1980	1981	1982	Total
2-2 H/C Secondary	23	9	24	56
2-1 H/C Post Secondary	7	3	9	19
3-5 H/C Guidance	1	2	0	3
3-6 H/C Curriculum	0	0	0	0
3-7 H/C Staff Development	0	0	0	0
Total	31	14	33	78

Table 5

Project Primary Goals

Goals	Percent of Projects
1. Acquisition of Vocational Skills/Competencies	81%
2. Mainstream into "Regular" Vocational Classes	65%
3. Development of Pre-Employment Skills	57%
4. Placement in Full/Part Time Job	43%
5. Staff Development	4%
6. Other	20%

Table 6

Project Activities

Activities	Percent of Projects
1. Specific Job Skill Training	65%
2. Individualized Program	61%
3. General Vocational Skills	54%
4. Pre-Employment Services	48%
5. Competency-Based Instruction	46%
6. Counseling	46%
7. Mainstreamed Program	46%
8. Remedial Training	46%
9. Evaluation/Assessment	43%
10. Work Experience/Coop.	37%
11. Self-Contained Program	28%
12. Placement Services	24%
13. Staff Development	11%
14. Other	24%

development" as a primary goal. Table 6 suggests that "specific job skill training" appeared as a principal project activity in 65% of the programs. This represents the most frequent activity reported by programs through the survey. "Individualized program" was reported as a principal activity by 61% of the programs. "General vocational skills" and "pre-employment skills" ranked third and fourth in frequency among the projects surveyed, respectively. Only 11% of the projects indicated "staff development" as an activity. This agrees generally with the findings for primary project goals presented earlier in Table 5. The finding of "specific job skill training" as the most frequent activity among projects coincides with the large percentage of programs indicating "acquisition of vocational skills/competencies" as their primary goal, as reflected in Table 5. Current mandates are reflected in the finding that "mainstreamed program" was represented in 46% of the programs as compared to "self contained program" which was only represented in 28% of the programs. Moreover, many of the self-contained programs included components which involved mainstreaming.

Question 3. To what extent do projects represent "best practice" in services to the handicapped?

"Best practice" is a subjective term which represents a judgement as to the degree to which the procedures or methods which are used represent the ones thought to be the most effective. For purposes of this study, a vocational program for the handicapped exemplifies "best practice" when it incorporates the following program features:

- individualized instruction
- integrated instruction (mainstream)
- real job skills (job skills and training)
- placement in paid employment
- competency-based instruction
- community-based instruction (work experience/co-op).

While it is not claimed that the above program features represent a comprehensive list of those that might be considered "best practice," they do represent what is commonly expected as non-mandated optional features of programs that would be illustrative of "best practice." To determine whether the funded projects represented "best practice," an analysis was performed on the data collected in the mail survey and through the personal/telephone interviews with LEAs. In analyzing these data, the number of "best practice" features was totaled for each project and a mean was computed across projects for the mail survey and the interviews. Table 7 shows the results. In this table, the mean number of "best practice" features is shown separately for each type of survey with the corresponding percentages based on the total number of features possible to exhibit (i.e., 6). Thus, it can be seen that approximately half of the features of what might be considered "best practice" are exhibited in current vocational education programs for the handicapped.

A slightly different perspective on "best practice" might be obtained by looking at the content of the programs funded. That is, the extent to which the programs focus on vocational skills vs. pre-vocational skills can be examined. For this purpose, both the mail survey and interview data were analyzed once again. The analysis consisted of computing the percentage of programs which indicated that they taught vocational skills,

Table 7

"Best Practice" Features Exhibited

Data Sources	Number of Features*	Percent
Mail Survey	2.93	49%
Interviews	3.13	52%

*Highest possible number of features = 6.

Table 8

Types of Skills Taught

Skill Types	Mail Survey	Interviews
Vocational Skills	31%	18%
Pre-Vocational Skills	19%	13%
Both	44%	62%
Neither	4%	8%

Table 9

Funds Distributed by Category

Category	1980	1981	1982	Total
2-2 H/C Secondary	$2,615,115 (81%)	$3,042,866 (77%)	$3,458,883 (86%)	$9,116,864 (81%)
2-1 H/C Post-Secondary	401,683 (12%)	480,509 (12%)	390,361 (10%)	1,272,553 (11%)
3-5 H/C Guidance	224,050 (7%)	329,018 (8%)	106,597 (3%)	659,665 (6%)
3-6 H/C Curriculum	0 (0%)	0 (0%)	0 (0%)	0 (0%)
3-7 H/C Staff Development	0 (0%)	98,180 (3%)	65,254 (1%)	163,434 (2%)
Total	$3,240,848	$3,950,573	$4,021,095	$11,212,516

increases in overall funding across the three fiscal years. In addition, it should be noted that the "handicapped secondary" level represents funds distributed by entitlement.

When project distribution is examined by region (see Table 10), it can be seen that, over the period under study, the largest percentage of projects was funded in the western region. The number of projects funded, however, does not necessarily reflect the amount of funding represented by such projects.

Question 5. To what extent is there interagency cooperation in funding and administering the program?

This question represents a key issue in the literature. In 1979-80, the State Advisory Council for Vocational Education recommended that interagency cooperation be improved in this area. This was reflected in the state's annual plan. Despite these policy initiatives to improve interagency cooperation, staff interviewed at the state level generally reported a suspicion that there was not a whole lot of interagency cooperation present in the funding and administering of the program. It was felt that "since the funding doesn't require it, there is no incentive to do it." State staff also indicated that "there may be more cooperation at the LEA level" than at the SEA level. More interagency cooperation was observed at the LEA level during on-site observations and interviews than was found at the SEA level. This may be a result of LEA priorities and funded activities.

Vocational rehabilitation was involved somewhat at the local level with post-secondary projects. For example, at one local project they were able to use vocational rehabilitation funds for some job development and follow-up activities that would not have been possible with Bureau of Vocational Education funding.

Bureau of Vocational Education staff at PDE have an "informal" relationship with special education staff. For example, there are occasional telephone calls, periodic meetings, and joint task forces are established with representatives from both areas where work assignments require it. An example of the latter is the special education audit form, which has a vocational part. Vocational Education staff have also served on audit teams. Several initiatives were started a few years ago but dissipated as a result of staff turnover. PDE staff from the Bureau of Vocational Education who were interviewed indicated that "they would like to see a more formal, joint effort with the Bureau of Special Education" in the spirit of interagency cooperation. At the LEA level, some complaints were received about a lack of coordination between the Bureau of Vocational Education and other state offices. These were expressed particularly with regard to long range planning, development of policies and position papers, operations, planning, fiscal affairs, and administration. Some respondents indicated that the LEAs could use special education dollars to do things that vocational education funds won't permit them to do because of funding restrictions. This includes identification, assessment, and pre-vocational training for handicapped students.

In the 1980-81 state plan, five recommendations pertinent to this topic were offered: (1) that formal interagency agreements between vocational education, special education, and vocational rehabilitation be established; (2) that special education staff review all vocational education projects to insure no duplication of efforts; (3) that local vocational education staff participate in IEP development; (4) that the RCU develop film and materials; (5) that teacher in-service activities be enhanced. While there is no indication that the first recommendation was ever implemented, some of the others have been undertaken to a limited extent. For example, IUs now need to sign off on vocational education projects for the handicapped in order to avoid duplication of efforts. Although there may have been more formal cooperation between agencies during 1979-80 and 1980-81, none is strongly in evidence at the present time.

Outcomes

Project outcomes are probably among the most important areas of focus for the current study, but also among the least documented aspects of the program at all levels from the state down through the local. Not only is there a dearth of evidence available with respect to project outcomes, but there is also a largely misunderstood notion of what constitutes outcome evaluation. In fact, the notion of evaluation itself is often confused among program personnel with the concepts of assessment and individual diagnostic testing. One project, after being asked to provide additional information on outcome evaluation, supplied a 208 page final evaluation report. This evaluation report consisted of copies of diagnostic tests taken by participating students (some of them blank) together with individual instructional prescriptions or samples thereof. The entire 208 pages was devoid of any process or outcome evaluative information. Strong recommendations concerning the need for state leadership in the area of outcome evaluation are presented in a later section. In the present section, however, questions with regard to project outcomes are addressed in as comprehensive a manner as permitted by the scarcity of data available to be surveyed.

Questions 1 and 2. Have the needs of the target population been met? Are needs met because of PDE funded projects or other factors?

To address this question, data from the mail survey and interviews were chiefly utilized. Using these data collection techniques, the question was posed as to whether the projects with which the respondents were connected met the intended needs. Given the general nature of the question and the self-report aspect of it, it is not totally unexpected that the positive results shown in Table 11 were obtained.

Examining this dichotomous self-report of success more closely, both the mail survey and interview data collection techniques provided independent estimates of program outcomes with respect to three positive types: generally positive outcomes, graduates successfully employed, and students mainstreamed into regular vocational education. Table 12 indicates the analysis results for each of these three outcome types for both the mail survey and interviews. For each outcome type, the percent of the total number of programs sampled responding is indicated, and the mean estimate of program impact with respect to that outcome category is presented. Data on responses from the personal and telephone interviews were based upon the sufficiency of evidence for making a decision or an estimate with regard to each of the outcome categories. That is, the response rate represents the percentage of programs in the sample for which sufficient evidence was deemed present by the interviewer to warrant

Table 11

Have the Projects Met the Intended Needs?

Response	Mail Survey	Interviews
Yes	100%	100%
No	0%	0%

Table 12

Types of Project Outcomes

Outcome	Mail Survey		Interviews	
	Response Rate	Mean Impact	Response Rate	Mean Impact
1. Positive Outcomes	74%	81%	33%	84%
2. Graduates Successfully Employed	44%	49%	44%	57%
3. Mainstreamed into "Regular" Vocational Education	65%	64%	23%	64%

inclusion in the mean impact estimate. As might be expected, the response rates for the interviews were lower than those from the mail survey. This was probably due to the more stringent requirements for available evidence which were applied by interviewers before including the data, as contrasted this with a lack of any requirements on respondents to the mail survey with respect to sufficiency of evidence. However, the impact estimates for mail survey and interview data collection methods are remarkably similar. By replicating the mean impact estimates in this fashion through two independent data collection procedures, considerable credence and confidence is placed in the obtained results. This leads to the generalizations that of all of the handicapped students participating in vocational education programs, about 80% of them have seen some type of positive outcome, with approximately 50% gaining successful employment upon graduation and approximately 64% being mainstreamed into regular vocational education programs.

Questions 3 and 4. What is the evidence of project impact? What programs work best for whom?

While independent verification through separate surveys of the positive effects of vocational education for the handicapped represents something more than collective opinion, on the other hand, it represents considerably less than what would be considered an adequate evaluation of program outcomes from a policy-making perspective. For this reason, data were examined on the kinds of evaluations which were conducted by funded programs in an effort to document any need for more formal evaluation requirements, policy, or guidelines for local programs from the state level.

For purposes of this study, a vocational program for the handicapped was considered to have conducted a "formal evaluation" if information on process and outcomes was on hand, ready for use and decision-making, and such information:

- had been collected on relevant project and state goals
- had been properly aggregated, analyzed, and interpreted
- included comparison to no-project conditions
- had been compiled in some written statement which included results and conclusions.

Once again, data from the mail survey and interviews were used to provide information on the extent of formal program evaluation conducted within the vocational education funding program for the handicapped. All programs within the separate samples for the mail survey and interviews were categorized with respect to the following types of evaluation evidence present for their individual project: evidence of formal evaluation, formal evaluation reported, no formal evaluation, and no response. Table 13 presents the results of analysis of this information. As can be seen from the table, only between 5% and 11% of the projects show any evidence of formal evaluation. This seems disturbingly low in a program which is spending more than 4 million dollars per year in supporting projects of this type.

With respect to Table 13, it should be noted that the substantial differences between the mail survey and personal/telephone interview figures for the "formal evaluation reported" and the "no formal evaluation"

Table 13

Projects Conducting Formal Evaluation*

	Mail Survey	Interviews
Evidence of Formal Evaluation	11%	5%
Formal Evaluation Reported	51%	10%
No Formal Evaluation Reported	46%	90%
No Response	3%	0%

*The second through fourth response categories are mutually exclusive and thus add to 100%, while the first category is a subset of the second category.

category were probably attributable to the greater stringency with which interviewers questioned the project staff undergoing personal and telephone interviews. On the mail survey, respondents were free to interpret loosely their responses as to what constituted a formal evaluation. Project staff were less likely, during a formal interview, to give the interviewer information that could be in any way challenged. This speaks well for the validity of the personal and telephone interview methods of data collection.

In the absence of data on outcome evaluation available for projects funded under the vocational education for the handicapped program, certain indirect indicators of program impact may be examined. One of these is the extent to which local projects have produced a "ripple effect." That is, to what extent has the project been in demand in districts outside of the home district as indicated by requests for information, for presentations, or for technical assistance in adopting or replicating the program. These may suggest that the positive effects the program has had, however documented, are sufficiently impressive to warrant the attention and the dedication of resources of other districts toward adopting or replicating this program for their own use. Information on this effect is presented in Table 14. The results presented in this table are based on an analysis of data from personal and telephone interviews. Those interviewed were asked whether or not their projects produced a ripple effect. They were also required to give evidence or further describe the kind of ripple effect. Based on their elaborated response to this item, analyses of the data were undertaken. Their responses were grouped into four categories: yes, no, maybe, and not applicable. The results indicated that for at least 37% of

Table 14

Have the Projects Produced a Ripple Effect?

Response	Percent Responding
Yes	37%
No	58%
Maybe	4%
Not Applicable	0%

the programs there was active interest from outside the home district in information and/or technical assistance necessary in adopting or replicating the program.

Question 5. Have projects developed local capacity to continue to meet needs of target group?

This question is particularly important in view of the alterntive capacity building vs. consumptive approaches to funding discussed in relation to one of the earlier evaluation questions on PDE priority solutions (see components II, questions 1 & 2).

Based on data secured from the personal and telephone interviews, an analysis produced the tabulated results shown in Table 15. This table reflects the percentage of projects indicating whether they could continue operations without state funding. Almost a quarter of the projects indicated that they could continue without any further state funding. When the percentage of projects which responded with a "maybe" is added, the indication is that as many as 40% of all of the programs currently funded under the vocational education for the handicapped program could continue without any further state funding. This result needs to be clarified in certain respects, of course. The programs were certainly not responding on the basis of continuation of their local projects at the full level of operation and service which they currently maintain. There is, therefore, no way of projecting the actual numbers of students which could be served, or conversely which could not be served, under circumstances in which no further funding would be available to projects currently operating.

Table 15

Could the Projects Continue Without State Funding?

Response	Percent Responding
Yes	24%
No	51%
Maybe	19%
Not Applicable	6%

Nevertheless, from a capacity-building standpoint it is encouraging that the self-report data indicates evidence of permanent effects of funding.

Policies

The following study questions address various areas in which future directions and policy recommendations can be made regarding the Bureau of Vocational Education's vocational education program for the handicapped. As this section is part of the analysis chapter, suggestions for future directions and policy recommendations will be limited to those directly represented in the data collected in connection with the study. A synthesis of the data and information presented in this section, together with RBS' own suggestions in these areas, is presented in the later chapter dealing with conclusions and recommendations.

Questions 1 and 2. What issues or activities require further attention? What recommendations for future policies/practices can be made?

Based on telephone and personal interviews as well as information gained through the mail survey, the following were indicated by respondents as issues or activities relating to vocational education of the handicapped that require further attention or recommendations for future policies/practices.

- The method of funding of vocational education programs for the handicapped. PDE ought to fund programs based on the quality of the program rather than the sheer number of students enrolled or the economic conditions prevailing at the local applicant level.
- The need to look at work directions other than manufacturing for the placement of the handicapped.
- The need to examine ways in which vocational programs for the handicapped can be kept current.

- The need for a standard operational definition of mainstreaming. PDE needs to generate a standard definition of mainstreaming, as the present one is inadequate in several respects.

- The need to move away from an emphasis upon production data.

- The need for dissemination of information about successful projects. PDE needs to build funds for this into local program budgets.

- The need for more stringent evaluation of projects. PDE needs to build funds for this into local program budgets.

- The need for closer monitoring of local project operations. PDE needs to institute a program monitoring procedure which fosters more accountability.

- The need to move away from a definition of vocational education for the handicapped which simply means "jobs."

- The need to provide opportunities and application guidelines which go beyond the traditional and are more creative in programming. PDE needs to broaden the application guidelines for funding. These application guidelines are currently too restrictive and do not allow for non-traditional or innovative approaches to vocational programming for the handicapped.

- The need for more follow-up evaluation and examination of employment results. PDE needs to provide for more follow-up of outcomes of programs at the local level in order to more closely examine employment results.

- The need to provide more opportunity in programming for incorporating pre-employment training, so handicapped students will be better prepared for specific skills training.

- The need to provide more vocational programming for handicapped girls.

- The need to provide more opportunity for remedial work via computer assisted instruction.

- The need for more flexibility in the application of funds.

- The need for better management information system information. PDE needs to redesign its management information system relating to vocational education for the handicapped. Current VEMIS are inadequate for use by local programs in that they are generally believed to be of little use, somewhat inaccurate, and about two years out of date.

- The need for better information with which to do long range planning.

- The need for vocational education to give more emphasis to inter-agency agreements.

- The need for better definitions and standards regarding appropriate vocational education programs and activities for the handicapped. PDE should produce clear definitions and standards regarding what is appropriate for vocational programming for the handicapped leading to graduation.

- The need for an increased accountability among locally funded programs for vocational education of the handicapped. PDE needs to require final reports from locally funded programs which include evaluations. PDE should provide for more accountability in the use of funds for each grant recipient.

- The need to promote more innovative programs for vocational education of the handicapped.

- The need to provide more flexibility in expending funds.

- The need to relax the certification requirements for vocational education personnel to realistic levels.

- The need to better address the social needs of special education students.

- The need to share information among locally funded programs. PDE should provide a directory of programs that are funded for vocational education of the handicapped, describing what each local program is doing.

- The need for better evaluation and needs assessment at the local level.

- The need for less redundant and more streamlined application guidelines.

- The need for better inservicing of vocational teachers on the needs of handicapped students. PDE should require regular vocational education faculty to receive inservice instruction on the teaching and management of handicapped students in vocational education.

- The minimum wage issue - if the minimum wage is lowered there may not be enough incentive for employers to use the co-op education programs, especially in economically depressed areas. Even if the employers would hire more students, students would most likely quit school for full time work.

- All vocational education teachers need exposure to handicapped programs.

- The need to provide more competitiveness in the awarding of grants.

- The need to provide extra funding to programs that have demonstrated they are exemplary.

- The need to better identify current local employment needs in the community and then to provide training appropriate to meeting those needs.

- The need to document the cost effectiveness of vocational programs for the handicapped in order to justify increased funding.

- The need to better educate new co-op employers and to provide more public relations materials on effective programs.

- The need for more intensive work on placements and attitude changes and job development among potential employers.

- The need for more communication and exchange of information on problems among programs. PDE should institute regional meetings of similar personnel to share ideas in vocational programming for the handicapped. PDE should provide for a means of sharing resources and teacher materials among local programs.

- The need for identification and dissemination of information on exemplary programs in vocational education for the handicapped. PDE should provide more technical assistance to locals in the area of programming versus applications for funds or fiscal monitoring. PDE should provide a means for more publicity for effective local programs. PDE should provide information on pieces of programs that are found to be effective and can be replicated elsewhere.

- The need for more programmatic technical assistance from state to local programs. PDE should provide more technical assistance to locals in the area of programming versus application guidelines for funds or fiscal monitoring.

- The need for revised timelines for notification of grant acceptance and receipt of funds in order that delays in start-ups are not produced by a late forwarding of funds.

- Grant application materials should be sent to the project director in addition to the sponsoring institution in order to avoid the possibility of missing the grant because of getting information forwarded too late to apply.

- PDE should utilize the inter-agency agreement vehicle for facilitating programming.

- PDE should re-evaluate the use of entitlements. There needs to be some kind of merit system for funding and a means for creating a resurgency in the proposing of innovative programs.

- The graduation requirements almost prevent sufficient time for vocational education with all of the general education requirements needed.

- The requirement of 160 minutes of instruction is a problem in operating a program for juniors and seniors only.

- The need for better screening of the handicapped in order to maximize their chance for success.

- The need for more money for computer-assisted instruction for the handicapped. PDE should provide more funding opportunities for equipment, especially computers, and mini-grants for use of computer-assisted instruction with the handicapped.

- The need for better communication between the areas of vocational education and special education at the state level in order to avoid the frequent conflicting memoranda and messages coming to local programs independently from these areas. PDE should foster better communication between vocational education and special education areas within its own department in order to provide a more unified approach to education of the handicapped and reduce such conflicts and contradictions in communications to local districts.

- The need for a standard vocational education curriculum for various handicapping conditions, especially for mentally retarded handicapped students.

- Special education teachers need to be certified in vocational education to offer vocational education courses, but vocational education instructors need no special education certification in order to teach special education students in a mainstreamed environment. This seems contradictory. PDE needs to lower or ease certification requirements for vocational education programs for the handicapped.

Questions 3 and 4. What should be PDE's role in carrying out its functions in regard to: leadership, funding, dissemination of information, technical assistance/staff development, monitoring/evaluation/quality assurance? How can PDE improve in carrying out its current role regarding these dimensions?

Many of the recommendations provided by respondents, as indicated in questions 1 and 2 above, relate to the various elements in the present question. The following paragraphs discuss each of the elements in light of recommendations received from the field through personal and telephone interviews, and through the mail survey.

With regard to PDE's role in terms of leadership, it was felt among local program staffs that PDE should take a more proactive role in providing leadership for vocational education programs for the handicapped. PDE should be more than a gate keeper for the distribution of federal funds. Rather, PDE should: establish standards to enhance the overall quality of vocational education programs for the handicapped in Pennsylvania; provide for the identification, dissemination, and replication of exemplary program techniques; revise application guidelines in a way that would stimulate development of innovative programs; revise funding requirements to provide for more quality control, program evaluation, and greater local program accountability; and take the initiative in providing more programmatic technical assistance to local programs.

With respect to funding, local programs generally saw PDE's role as needing to provide a more equitable distribution of funds, and one that would insure innovative initiatives and quality in the programs funded.

Substantial feedback was received from local programs with regard to the dissemination of information. PDE was used to take the lead in identifying exemplary programs which are shown to be effective in vocational education for the handicapped. Once these programs have been identified, PDE should take steps to insure that information with regard to functions described in the preceding paragraphs. These suggestions, while not comprehensive in their coverage, are presented below.

With respect to leadership, the following suggestions were offered by respondents. PDE should develop a standard definition for mainstreaming, and for the concept of vocational education especially as it applies to the handicapped. PDE should allow more emphasis to be placed on pre-employment training in addition to training in specific job skills. PDE should also encourage the use of computer assisted instruction with the handicapped. In its leadership role, PDE should provide more comprehensive and more up to date management information system reports on vocational education for the handicapped. This would enable more effective long range planning to be undertaken. In addition, PDE should develop standards regarding appropriate program activities for vocational education for the handicapped which would contribute toward graduation. PDE should take steps to develop a formal vocational education curriculum for various handicapping conditions.

With regard to funding, PDE should base its funding distribution policies more on the quality of programs being proposed rather than the local economic and unemployment conditions, or the number of students or student population within the district. It should build into local program grants funds for evaluation and dissemination. PDE should broaden its funding guidelines to allow non-traditional activities and programs to be proposed. The Department PDE should allow pre-employment training activities in its funding guidelines as well as specific skill training. Its funding guidelines should include requirements for an annual report and an annual evaluation at the local level. More flexibility should be allowed in the spending of funds on the local level. The grants procurement process should be competitive as opposed to formula-based. PDE should revise its funding application timeline and seek to move up the deadlines for grants acceptance and facilitate the transfer of funds to the local programs in order that they may operate efficiently. Finally, PDE should send application materials for new grants to the project director instead of (or in addition to) the funding agency so that the appropriate person is notified in time to meet the deadlines.

PDE can improve the dissemination of information by building funds into each project for dissemination. Final project reports and evaluation reports for each project should be received in a form that can be disseminated. PDE should promote conferencing and the sharing of information among projects. By providing a list of all projects and what they are funded for, PDE could promote more communication among programs and the exchange of information regarding problems. PDE should identify and disseminate information on exemplary programs. Finally, PDE should organize regional meetings concerning exemplary projects and practices.

With respect to technical assistance and staff development, PDE should provide for more inservice instruction of regular vocational teachers on the needs and the instructional techniques to be used with handicapped students. The Department should provide more technical assistance in content and programmatic areas, and more PDE funding should be provided for staff development and inservice activities.

With respect to monitoring, evaluation, and quality assurance, PDE should revise its monitoring system to provide for greater quality assurance. Guidelines and funding for annual evaluation of programs at the local level should be provided. PDE should require an annual report which includes process and outcome evaluations for each project. Finally, PDE should change the method of distribution of funds in order to promote greater quality among projects.

Question 5. What Criteria Should PDE Employ in Funding Future Programs for the Handicapped?

Feedback from interviewees regarding funding criteria for vocational education programs for the handicapped was varied. Generally, most of the suggestions regarding criteria for funding, as indicated in the previous three study questions, advocated a change in funding criteria from entitlement to some form of funding based on the quality of the program being proposed. Of course, these suggestions were coming from local districts who were receiving less funding than they might have desired. No suggestions for changes in funding criteria were received from districts benefiting in large measure from the present method for allocation of funds. However, in a number of cases it is clear that suggested changes in funding criteria were based less on a concern for the amount of funds being received currently by the district and more on the need for improving the quality of programs and the accountability of local districts for funds being received. Further discussion with regard to these issues is provided in the conclusions and recommendations chapter of this report.

IV. CONCLUSIONS AND RECOMMENDATIONS

This chapter states the conclusions and recommendations reached by Research for Better Schools in carrying out the evaluation study and interpreting the results of the various analyses of data collected during the study. Both conclusions and recommendations are presented in accordance with the major objectives of the evaluation. The conclusions represent inferences derived from a synthesis of results of analyses of the data collected as part of the study as well as other background and ancillary information obtained during the conduct of the study. Recommendations are drawn on the basis of these conclusions. They represent rather concise statements on the possible utilization of the results for making changes and improvements in policies, procedures, or resource allocations with respect to vocational education programs for the handicapped.

Problems and Needs

With respect to problems and needs in providing vocational education services to the handicapped, the following conclusions are drawn.

- It is not possible to determine the extensiveness of the target population in Pennsylvania without consistency of data collection methods in this area as well as a state-level definition of what constitutes appropriate vocational education for the handicapped.
- Principal problems and needs center around equity in funding, program evaluation and accountability, inservice instruction in special education for vocational teachers, identification of exemplary programs, curriculum standards, inter-project communication, innovative programming, and greater inter-agency cooperation and coordination. These problems and needs have been

identification of exemplary programs and for providing the necessary publicity and dissemination to assist other local districts in learning about such programs is of paramount importance if the most is to be made of the investment in federal/state funds at the local level. Encouraging the adoption or replication of programs already proven effective by other districts with similar needs is cost-effective. Similarly, inter-project communication about effective programs, practices, and problems needs to be enhanced. Shared problem solving among local districts on a state or regional basis can also serve to maximize utilization of federal/state funds for local programs. Such a sharing of effective programming, practices, and ideas can also help to stimulate more innovative approaches to vocational education for the handicapped and avoid repetition of less effective practices simply because of a lack of knowledge of anything better to use. The need for greater state leadership in the area of curriculum and standards is also evident. There needs to be better interagency cooperation and efforts toward establishing standard curriculum requirements for vocational education of the handicapped.

Given the above conclusions related to the area of problems and needs, the following recommendations are offered.

1. PDE should develop a statement of philosophy regarding the appropriateness of vocational education for the handicapped and then prescribe standard methods for determining the handicapped students for whom it would be appropriate.

2. PDE should conduct an annual field-based assessment of problems and needs in vocational education for the handicapped, and monitor progress in addressing them.

Priorities

With respect to priorities and PDE's approach to addressing the problems and needs of the handicapped in the area of vocational education, the following conclusions are drawn.

- The existing PDE approach, and one it finds presumably to be desirable in attempting to accomplish its goals, is predominantly fiscal rather than programmatic. It also tends to be more consumptive than capacity-building in nature.
- State priorities are determined principally in a reactive rather than a proactive way. They are based, with few changes, upon announced federal policies. State priorities are established in the state plan and, unless influenced by the state advisory council for vocational education or the advocacy groups for special education, remain largely the same from one year to the next.
- State guidelines for funding of vocational education programs for the handicapped appear to be fairly clear and generally meet the information needs of local education agencies. State funding is distributed through an allocation method rather than a competitive process.

The PDE approach to vocational education for the handicapped appears to consist mainly of a procedure for distributing federal funds to local projects. It does not represent a holistic approach to improving local services which would advance the quality of vocational education services for the handicapped on a state-wide basis. One characteristic of this lack of a holistic approach appears to be a focus by local projects upon more operational concerns rather than those that would contribute to and build local capacities to provide such services. One apparent result of this would be the fostering, through the distribution of federal funds, of a network of local services which would be continually dependent upon the receipt of such funds. An alternative, and seemingly more desirable, approach would emphasize the building of local capacity to provide services even if support from the state/federal government were diminished.

PDE priorities are determined simply in response to federal priorities. This procedure reflects a general lack of comprehensive planning and leadership on the part of the state.

In most cases, state guidelines for funding of vocational education for the handicapped programs appear to meet the needs of the local education agencies. The use of an allocation method or entitlements for distributing the funds has met with considerable criticism. There is sentiment among local districts that a more competitive funding process be introduced.

Considering the above conclusions and their discussion, the following recommendations are made with respect to PDE priorities.

3. In its funding approach, PDF should be more programmatic than fiscal and should place emphasis upon capacity-building over consumption.
4. PDE should take a more proactive role in establishing priorities for vocational education services for the handicapped and should go beyond a mere restatement of federal priorities in developing its own long-range goals and strategies.
5. PDE should modify its funding guidelines to reflect more closely its long-range goals and strategies for vocational education for the handicapped.

Activities and Programs

The following conclusions are drawn with respect to activities and programs which are funded by PDE as part of local projects for providing vocational education services to the handicapped.

- The overwhelming majority (over 80 percent) of the programs are funded by the state at the secondary level through entitlements and are continued year after year. The primary goals of such programs are: acquisition of vocational skills/competencies; mainstreaming into regular vocational classes; development of pre-employment skills; and placement in full/part-time jobs. The most frequent activities of such programs are: specific job skill training; individualized programming; general vocational skills training; and pre-employment services. Little exists in the way of formal communications or relationships among funded projects.

- About half of the activities within funded projects represent what might be considered "best practice" in the field of vocational education services for the handicapped.
- In terms of funding distribution, the vast majority of funds (over 80 percent) goes to support secondary programs, and continuing rather than new programs. In terms of services to the individual handicapping categories, these funds tend to serve the the mentally retarded (59%); learning disabled (25%); the emotionally disturbed (10%); and the physically handicapped (6%).
- Little in the way of interagency cooperation presently exists at the state level with regard to funding or the administration of vocational education projects for the handicapped.

It is clear that the vocational education program for the handicapped is primarily a program for the secondary level, and its funds are distributed through entitlements. Projects funded at this level and in this manner tend to continue from year to year with little or no change.

The fact that approximately half of the activities used within funded projects represent what might be considered "best practice" is not surprising, considering that the emphasis at the state level is not upon providing programmatic technical assistance to local projects, and that there is little interagency communication and coordination between the Bureau of Vocational Education and the Bureau of Special Education at the state level. There is considerable room for improvement in this area, but greater leadership at the state level needs to be exerted in order for this to occur.

The distribution of funds across local educational agencies for providing vocational education services to the handicapped parallels the manner in which programs are distributed, that is, with most of the money and programs going to the secondary level and for continuation efforts.

The general lack of interagency cooperation existing at the state level with regard to the funding and administration of vocational education projects for the handicapped appears to be consistent with the reactive approach of the Bureau of Vocational Education to meeting the needs of the handicapped, and the predominantly fiscal approach used in distributing federal/state funds for such programs.

In view of these conclusions and their discussion relating to activities and programs, as presented above, the following recommendations are offered.

6. PDE should delineate "best practice" standards for vocational education services to the handicapped and should require grant applicants to incorporate such standards into their local program applications.

7. The Bureau of Vocational Education should initiate communication and coordination with other bureaus within PDE (e.g., Special Education) as well as other departments in order to improve the quality of vocational education programs for the handicapped, encourage "best practice," and provide for the optimal use of vocational education services within the broader context of all services available for addressing the educational, training, and rehabilitative needs of the handicapped.

Outcomes

In terms of outcomes for vocational education projects for the handicapped, the present study leads to the following conclusions.

- The needs of the target population are generally being met, with the majority of program participants achieving positive outcomes, and about 50% of those who graduate securing employment.

- It is not possible to determine what programs work best for whom under what conditions because of the general lack of evaluative evidence concerning project impact.

- Less than half (about 40%) of the projects funded to provide vocational education to the handicapped indicated that they either definitely or possibly could continue their programs without any further state funding.

To the extent the target population can be adequately identified, a problem alluded to earlier, the needs of this target population appeared to be met to some degree by existing programs for vocational education for the handicapped. This is based upon self-reports from local project staff either through mail questionnaire responses or through personal or telephone interviews. Handicapped students appear to be achieving positive outcomes and receiving job placements upon graduation from programs. The extent to which federal/state funds contribute to the success of these programs, as opposed to local or matching funds, cannot be determined because most programs operate as complex interdependent efforts for which federal/state funding represent nearly inseparable contributions. It is therefore impossible in practice to attribute effects of programs based on separate aid from state/federal as opposed to local education agencies.

Evidence of project impact for individual projects and for types of projects are largely based on self-reported information, as mentioned earlier. It is rare that a project would have a formal evaluation in place or would have collected, analyzed, and prepared evaluation data in a form that could be utilized for inferring project impact in an objective fashion. Fewer than 10% of all projects under study were found to have any evidence of project impact. Moreover, it was difficult, if not impossible, to determine what programs work best for whom under circumstances in which there was virtually no objective evaluation data upon which to make such decisions.

The fact that study results indicate about 40% of the projects either definitely or possible could continue their program services without any further state funding is difficult to interpret without any official state goals or strategies addressing capacity building or self subsistence.

The above conclusions and discussion concerning project outcomes has led to the following recommendations.

8. PDE should specify principal outcomes for vocational education programs for the handicapped and should require all projects to report the extent of achievement of these outcomes with substantiating documentation or evidence.

9. PDE should require formal evaluations of all projects. Projects would be required to specify formal evaluation designs in their grant applications, and continuation projects would be required to incorporate results of the previous year's evaluation into a design or redesign of their program plan for the succeeding year. This would make possible analyses of the attainment of objectives of individual programs as well as types of programs.

10. PDE should determine the level of emphasis needed to be placed upon capacity building at the local level and should incorporate suitable requirements into the funding guidelines.

Policies

With respect to future directions and policy recommendations concerning PDE's administration of state and federal funding for vocational education for the handicapped, the following conclusions are drawn.

- Issues and activities requiring further attention seem to be strongest in the following areas: programmatic technical assistance; allocation of federal and state funds; exemplary program identification and dissemination; program evaluation and quality assurance; innovative programming; inter-program communication; interagency cooperation; and curriculum and standards.

- Respondents to surveys and interviews felt that: PDE should take a greater leadership role in vocational education for the handicapped; funding criteria and method of allocation should be changed; greater emphasis should be placed on dissemination; more programmatic technical assistance and staff development should be provided; and greater monitoring, evaluation, and quality assurance should be provided.

- Respondents to surveys and interviews indicated that PDE should employ more quality criteria and more competitiveness in funding future programs for the handicapped.

A multitude of issues and activities requiring further attention were indicated by respondents to both surveys and interviews. A more specific listing of these was presented in the analysis chapter of this report. The first conclusion in this section lists those which could be considered major issues or activities requiring further attention.

A large variety of responses to survey and interview questions involving PDE's role in carrying out their functions was received. Specific ideas and feedback with regard to leadership, funding, dissemination of information, technical assistance/staff development, and monitoring/evaluation/quality assurance can be found in the analysis chapter of this report.

A large number of respondents to both survey and interview questions indicated that the method of allocation used by PDE to distribute state/federal funds needs to be changed. Specific responses, presented in the analysis chapter of this report, ranged from suggestions that the process become entirely competitive to various other less radical modifications and alternatives to the entitlement method.

Based on the conclusions and discussions above, related to future directions and policies, the following recommendations are offered.

11. PDE should exert a stronger leadership role in vocational education services for the handicapped by promoting the development of model curricula and instructional standards.

12. PDE should develop long-range goals and strategies based upon an annual needs assessment conducted among local programs.

13. PDE should enhance quality assurance among local projects by instituting more stringent reporting requirements, including: annual final reports; process and outcome evaluations; and, for continuation projects, program improvement plans for each succeeding year's application.

14. Based upon good evaluation information, PDE should identify exemplary programs and disseminate information about these programs to all local educational agencies.

15. PDE should somewhat reduce its fiscal and procedural monitoring and technical assistance, and should institute a broader program for programmatic technical assistance to local educational agencies providing vocational education services to the handicapped.

16. PDE should encourage more staff development and in-service/pre-service instruction for regular vocational educators in providing for the handicapped, especially under mainstreamed conditions.

17. To facilitate inter-project communication, PDE should compile and distribute abstracts of all funded programs to all local educational agencies.

18. PDE should re-examine its current methods and procedures for funding programs, and should encourage more innovation in instructional techniques and more competitiveness in the application process.

V. DISSEMINATION

As of the writing of this evaluation report, some dissemination of the findings of this study has already taken place -- a presentation of preliminary results was made at a session of the 1984 Pennsylvania Vocational Education Conference. A paper proposal has also been submitted to the Vocational Education Special Interest Group of the American Educational Research Association for possible presentation at their spring 1985 annual meeting.

The primary vehicle for dissemination of this final report, however, will be Pennsylvania's Vocational Education Information Network (VEIN). It is expected that PDE will also submit the report for inclusion in the ERIC system. In addition, an Executive Summary of the final report has been prepared for distribution. This summary, with PDE approval, will be further disseminated to institutions, associations, and groups, such as the following:

- Universities (e.g., Temple, Penn State, Pitt, all schools in the state university/college system)
- Pennsylvania State Department of Education (various bureaus and units)
- Intermediate Units
- Urban School Districts
- National Center for Research in Vocational Education (Ohio State University)
- Center for Vocational Personnel Preparation (Indiana University of Pennsylvania)
- Pennsylvania State Advisory Committee for Vocational Education
- Vocational Administrators of Pennsylvania

- Pennsylvania Association of Vocational Education Special Needs Personnel
- Pennsylvania Association of Vocational Teacher Educators
- American Vocational Association
- American Personnel and Guidance Association
- Pennsylvania Vocational Association
- Pennsylvania State Education Association
- RISE.

Also, RBS staff will cooperate with newsletters or publications of these groups and will prepare press releases, upon request. Finally, study findings and recommendations will be disseminated through existing RBS dissemination channels, such as the Research and Development Exchange.

The major purpose of this widespread dissemination effort is to generate an awareness of the status of vocational programs for the handicapped in Pennsylvania and the progress being made in this area. Such increased awareness will help to mobilize groups for acting on policy recommendations and future PDE policies. PDE, however, will be the ultimate beneficiary of the evaluation study, since results will provide a comprehensive data base for making important policy decisions and the impetus to move forward on those decisions.

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APPENDIX

APPENDIX

A. PDE Interview Guide

B. PDE Handicapped Project File Data Base

C. LEA Interview Sample

D. LEA Personal Interview Form

E. LEA Interview Guide

F. LEA Telephone Interview Form

G. LEA Mail Survey Questionnaire

H. State Goals for Vocational Education

A. PDE Interview Guide

Handicapped Program Interview

Person Interviewed: ____________________ Interviewer: ______________

Position Title: ____________________________ Date: ________________

1. What has been your role and responsibilities with respect to the Vocational Education Program for the Handicapped? During what period of time have you had this role and these responsibilities?

2. How extensive is the target population for this program in Pennsylvania? (I-1)

3. What are the special problems/needs of the target population? How would you concisely describe the background of the educational and/or training plight of the target group? (I-2)

4. Has the need for such programs been reduced because of the success of these programs or from other external courses?

5. What is the existing PDE approach to solve problems within this program (i.e., stated goals, long and short term objectives, guidelines)? Have the activities supported by PDE focused on priority solutions for the problems of the target population? (II-1)

6. What are desirable policies/practices for PDE to employ in order to accomplish goals for this program? (II-2)

7. How were PDE priorities determined and validated? (II-3)

8. What are the relationships (i.e., commonalities and unique features) between the various PDE objectives for this program? Are there planned complementary relationships between the objectives and activities of the different subareas of handicapped funding? (II-4)

9. Do PDE guidelines seem to meet the information needs of local education agencies with respect to this program? (II-5)

10. What is the current PDE funding approach for this program? How appropriate is the fund distribution in relation to the target group? (II-6)

11. To what extent is there interagency cooperation (e.g., Bureau of Vocational Education, Bureau of Rehabilitation, Bureau of Special Education, Research Coordinating Unit) in terms of funding and administering vocational education programs for the handicapped? (III-5)

12. Have projects developed the capacity to continue to meet the vocational needs of handicapped students? What does the documented evidence reveal with regard to improvement of the capacity of vocational education to meet the needs of present and future target populations either with or without supplemental funding? (IV-5)

13. What issues or activities require further attention in the future with regard to this program? (V-1)

14. What recommendations for future policies/practices can be made with respect to this program? (V-2)

15. What should be PDE's role in carrying out their function, with regard to: leadership, funding, dissemination of information, technical assistance/staff development, monitoring/evaluation/quality assurance? (V-3)

16. How can PDE improve in carrying out its current role regarding the dimensions noted above in the previous question? (V-4)

17. What criteria should PDE employ in funding future programs for the handicapped? (V-5)

B. PDE Handicapped Project File Data Base

CODING SCALE

PDE Handicapped Funding Areas

Subpart 2

1 Handicapped, Higher Education

2 Handicapped, Secondary

Subpart 3

5 Guidance, Handicapped

6 Curriculum, Handicapped

7 Staff Development, Handicapped

PDE HANDICAPPED ACTIVITIES/SERVICES

01	salaries and benefits
02	equipment, specialized
03	equipment, installation
04	equipment, rental
05	materials and supplies
06	facilities, rental
07	contracted services
08	transporation, travel
09	other

OBJECTIVES/COMPONENTS

01 special/single skill training

02 building trades - training - maintenance

03 auto repair - training

04 business - training - clerical, retail sales

05 medical services - training

06 agriculture - horticulture - training

07 cluster skill training

08 diversified/multiple occupational skill training - general industrial program

09 entry level job skill training

10 tool skills

11 work coop/work experience

12 academic program - includes - reading, math, language arts

13 home management instruction and institution - includes food services, home cleaning - domestic services

14 individualized instruction - support

15 competency based instruction

16 mainstreaming support

17 remedial component

18 mainstreamed program

19 modified program

20 placement program

21 sheltered workshop program

22 workshops conferences

41 TMR population or EMR population

50 handicapped - voc. guidance - career counseling

VOC. FIELD - HANDICAPPED

50	EL - K-6
51	6-9 - M-JR HIGH
52	6-12
53	K-12
54	M-12
31	ALL FIELDS
21	D.O. PROGRAM
19	COOP. PROGRAM
20	VOC. PREP TRAINING

C. LEA Interview Sample

Handicapped Project Interview Sample

	#	Title	Location	Funding	Type	Site Visit	Telephone
1.	76-1810	Instructional Personnel for the for the Handicapped	Berks Co. Avts	21,615	Secondary	X	
2.	76-1811	Vocational Special Education Liaison	Berks Co. Avts	21,780	Secondary	X	
3.	76-2002	Vocational Programs for the Handicapped	Philadelphia	710,602	Secondary	X	
4.	76-2016	Skill Development in Least Restrictive Environ.	Bucks Co. IU #22	54,451	Secondary	X	
5.	76-2019	Handicapped-Special Education	E. Montco. Avts	31,428	Secondary	X	
6.	76-2043	Vocational Education & Training for Handicapped	Central Susquehanna	14,781	Secondary	X	
7.	76-2059	Vocational Education & Training	Capital Area IU #15	123,721	Secondary	X	
8.	76-2075	Vocational Skills Development Program for Handicapped	Chester Upland	33,070	Secondary	X	
9.	76-2086	Vocational Education/Single Skills	Norristown Area	24,367	Secondary	X	
10.	76-1801	Project Liaison, EMR,TMR, PH	Pittsburgh	233,463	Secondary		X
11.	76-1804	Food Services	Delaware Valley Avts	1,277	Secondary		X
12.	76-1808	Vocational Education for Handicapped Students	Luzerne Co. IU #18	34,234	Secondary		X
13.	76-1812	Vocational Lab Assistant	Reading-Muhlenberg Avts	11,645	Secondary		X

	#	Title	Location	Funding	Type	Site Visit	Telepho
14.	76-1816	Options in Vocational Education for Handicapped	Allegheny IU #3	51,093	Secondary		X
15.	76-2006	Modification of Food Service Program for Handicapped	Huntingdon Area	6,913	Secondary		X
16.	76-2011	Modified Skill Development Program for Handicapped	Seneca Highlands IU #9	27,190	Secondary		X
17.	76-2017	Vocational Education Training for Handicapped	Carbon Co. Avts	7,119	Secondary		X
18.	76-2023	Special Services for the Handicapped	Bethlehem Area	30,986	Secondary		X
19.	76-2028	Aides for Handicapped	Lackawanna Co. Avts	21,752	Secondary		X
20.	76-2035	General Industrial Program	Greater Johnstown Avts	37,044	Secondary		X
21.	76-2041	Special Shop Program for EMR Students	Butler Area	8,200	Secondary		X
22.	76-2047	Handicapped	Upper Adams	3,212	Secondary		X
23.	76-2052	Vocational Education for the Handicapped	Erie City	36,934	Secondary		X
24.	76-2057	Avts/Special Education Liaison Teacher	Beaver Valley IU #27	19,700	Secondary		X
25.	76-2064	Modified Vocational Education Program for Students with Special Needs	Mercer Co. Avts	24,706	Secondary		X
26.	76-2069	Improving Basic Skills Needed for Life Roles	Pennridge	6,204	Secondary		X

	#	Title	Location	Funding	Type	Site Visit	Telephon
27.	76-2074	D.O. for Handicapped	Conewaygo Valley	4,598	Secondary		X
28.	76-2079	Instructor of Vocational Education for the Handicapped-Tioga Co.	Blast IU #17	18,612	Secondary		X
29.	76-2082	D.O. York Co	Lincoln IU #12	47,736	Secondary		X
30.	76-2085	Support Services for the Handicapped	Venango Co. Avts	23,106	Secondary		X
31.	76-0814	Cooperative Diversified Occupation Program	Greenville Area	5,370	Secondary		X
32.	76-1007	Multiple Occupation Education	C. Westmoreland Co. Avts	49,720	Secondary		X
33.	76-1050	Diversified Occupations for Handicapped	Jefferson Co.-Dubois Avts	16,805	Secondary		X
34.	76-1051	Vocational Skill Training for Handicapped	Delaware Co. Avts	118,814	Secondary		X
35.	76-1065	Instructor of Vocational Ed. for Handicapped -Tioga Co.	Blast IU #17	9,725	Secondary		X
36.	76-1072	Vocational for Trainables	Hazleton Avts	12,318	Secondary		X
37.	77-2003	Vocational Studies for the Emotionally Handicapped	Montgomery CCC	63,366	Post Secondary	X	
38.	77-2009	Postsecondary Food Services Training	Elwyn Institute	21,486	Post Secondary	X	
39.	77-2011	Cleaning Services Training for MR Adults	Allegheny CCC, College Center-North	49,832	Post Secondary		X

D. LEA Personal Interview Form

HANDICAPPED SITE VISIT INTERVIEW

Name________________________________ Date__________________________

School______________________________ Interviewer___________________

Project_____________________________

A. Introduction

1. Review information on project abstract.

2. Describe general purpose of project, objectives, and procedures.

3. How many years has the project been running? What have been the major changes over time?

4. Describe how project relates to vocational guidance (or handicapped) needs.

5. Describe what improvement or advantage the project represents for the Pennsylvania vocational guidance (or handicapped) system.

B. Project Characteristics (Describe each)

1. Target Group -

2. Activities -

3. Staffing -

4. Resources -

5. Evaluation Procedures -

6. How were the project activities selected? What evidence exists that they represent "best practice" in the field?

C. Process Evaluation

1. Did evaluation procedures provide formative information?

2. Was the project implemented according to plan? Were there obstacles, changes?

3. What factors helped the project proceed smoothly?

4. Were the resources sufficient to accomplish project objectives?

5. Did the project get sufficient support from school and/or district administration?

D. Impact Evaluation

1. Did evaluation procedures provide information on project impact?

2. What was the impact of the project? Based on what evidence?

3. What activities work best for particular target population?

4. Did the project meet intended needs? How were needs diminished, eliminated, or otherwise affected?

5. Has the project produced "ripple effects on other schools"?

6. Can the project continue with diminished PDE resources? No PDE resources?

E. Recommendations

1. Do you have recommendations for PDE procedures or activities? Do the guidelines meet LEA needs?

2. What issues or activities require further attention?

Interviewer Comments

E. LEA Interview Guide

PDE SITE VISIT INTERVIEW GUIDE
VOCATIONAL GUIDANCE & HANDICAPPED PROJECTS

A. Introduction (suggested time = 10 minutes)

- The general purposes for this group of questions are to provide a non-threatening lead-in to the interview, to describe the overall context for the project, and to verify information on the project abstract. It should establish what the project intended to do.

- Interviewer should preface the questions with a brief overview of the purposes of the study, RBS' role, and basic content of today's interview. Ask if there are any questions. Provide a copy of the RBS Annual Report.

- Question 1: indictate that we have briefly reviewed sections of the project's proposal and have compiled an abstract to describe it; have the respondent verify abstract data; however, don't get bogged down in details; in some instances it may be better to get the respondent talking about the overall goals, objectives, etc. (Q.2) before mentioning data in the abstract.

- Question 2: self explanatory; make sure that the answer is not too long; may want to tie in with Q1.

- Question 3: self explanatory, note years before and after those being studied (79-80, 80-81, 81-82); if no longer operating ask why; given time limits, focus only on major changes (e.g., at policy level); reinforce the idea that the interview is focusing on three specific years of operation.

- Question 4: What is the major problem that the project has addressed?

- Question 5: The VEA specifies that PDE should help educational agencies to address vocational guidance/handicapped needs throughout the state; how is this project part of the "big picture"? What does the project "do" for the statewide system? Don't get into impact at this point.

B. Project Characteristics (Suggested time = 15 minutes)

- The general purpose for this group of questions is to accurately describe what the project did to accomplish its objectives.

- Note changes over various project years.

- Ask if there are any descriptive documents that we could take back to RBS and/or review during the interview.

- Question 1: who did the project serve (numbers and descriptive categories)?

- Question 2: briefly describe what was done; although this is the bulk of this section, can't spend too much time; examples of issues by project type are:

  a. guidance - components or features could include services provided, placement activities, counseling, establishment of resource center, etc.; describe typical student contact; determine if project involved "substitution" for prior services/activities (i.e., maintain guidance counselor).

  b. handicapped - services, type of instruction, curriculum, focus on pre-employment or skill development, mainstream vs. sheltered, etc.; describe typical day/week for a student.

- Question 3: number involved, roles, certification, (i.e., special ed, voc. ed, guidance, other), total FTE; note changes year to year; overview rather than specifics.

- Question 4: what did they have to draw upon, e.g., facilities, equipment, technical support, etc.; supplementary resources (not included in PDE grant), including additional funds.

- Question 5: note that PDE and VEA have implied that projects should undergo self-evaluation; have they done any evaluation? if so, describe; obtain available reports; PDE requires annual accountability reports and long-range planning efforts (LRPSI) for certain projects; do they have anything? don't get into description of impact yet.

- Question 6: how is what they've done exemplary in terms of what's regarded as "best practice" in vocational guidance/handicapped? e.g., for handicapped, must have adequate IEPs, should be individualized, responsive to local job market, should have coordination between special ed department and vocational ed department; may need to ask for evidence to back-up statements (e.g., IEPs, job market data, etc.); this is an important question for handicapped.

C. Process Evaluation (suggested time = 10 minutes)

- The general purpose of this group of questions is to have the respondent provide subjective judgments about the success/failure of project activities/implementation.

- Question 1: note if responses to this section are based on post hoc impressions or systematic formative evaluations, i.e., what is the basis for their responses?

- Question 2:. what barriers, if any, prevented them from doing what they wanted to do? Are there any implications for other projects based on their experience? Don't get bogged down in documenting minute changes.

- Question 3: reverse of Q. 2; what implementation factors have implications for other projects as facilitators of success?

- Question 4: self explanatory; if no, document additional needs, how this potentially affected outcomes.

- Question 5: as appropriate; did organizational/agency factors affect implementation.

D. Impact Evaluation (suggested time = 15-20 minutes)

- The general purpose of this group of questions is to document the nature and extent of program impact.

- This is probably the most important set of questions in the interview.

- Different impact areas are appropriate for different projects.

- Question 1: how did they gather what evidence of project impact? Is the evidence hard or soft? Obtain copies or review documented evidence.

- Question 2: what are their claims of impact? Document the source of each claim; specifically, note impacts such as placement rates, completion rates, achievement, mainstreaming (handicapped), skill development, affective, etc.; get subjective impressions of where the project succeeded and where it failed.

- Question 3: was there a relationship between certain activities and specific impacts? What activities seem to contribute most to particular kinds of impacts?

- Question 4: self-explanatory; important question given PDE "strategy"; if needs not totally met, what are remaining needs?

- Question 5: "ripple effect" refers to spillover to other schools, staff, students, etc.; e.g., has the project had any effects on processes or outcomes beyond what was specifically targetted in the proposal? Is it being institutionalized?

- Question 6: important question, but touchy issue; assume that diminished level of PDE resources for vocational education, in general, is a given; what would be effects of diminished/no PDE resources upon the project? Aside from support of program operations has the project added to agency "capacity" to deliver programs or services? If so, how (e.g., improved staff capability, program development, improved facilities, equipment, etc.).

E. Recommendations (suggested time = 5-10 minutes)

- The purpose of these questions is to give respondents an opportunity to make suggestions regarding future PDE vocational education strategies.

- Question 1: the first part of this question looks at recommendations for PDE roles, responsibilities, and/or policies (e.g., regarding funding, leadership, service delivery, quality assurance, etc.); the second part focuses specifically on the PDE application guidelines (and process); are they adequate and how could they be improved?

- Question 2: open-ended question for any other concerns.

F. LEA Telephone Interview Form

HANDICAPPED TELEPHONE INTERVIEW

Name: ______________________ Date: __________________________

School: ____________________ Interviewer: ____________________

Project: ___________________

1. Describe the general purpose and objectives of the project.

2. How many years has the project been running? (Provide historical context.)

3. Describe how the project relates to vocational guidance/handicapped needs and how it adds to Pennsylvania's vocational education system.

4. Briefly describe project characteristics in terms of:

   a. Target Group -

   b. Activities (including how activities were selected) -

   c. Staffing -

5. Did you conduct any formal evaluation activities? If so, describe process and data sources (e.g., hard vs. soft).

6. Was the project implemented according to plan? Were there any changes/obstacles/barriers (e.g., level of resources, administrative support, etc.)?

7. What factors helped the project proceed smoothly (i.e., facilitating factors with implications for other projects)?

8. What is the impact of the project (e.g., related to objectives)? based on what evidence?

9. Did the project meet intended needs? Were overall needs of target population diminished, eliminated, or otherwise affected?

10. Has the project produced "ripple" or side effects (e.g., on other schools)?

11. Can the project continue with diminished PDE resources? No PDE resources? What are the implications?

12. Do you have recommendations for PDE procedures or activities? Do the application guidelines meet LEA needs?

13. What issues or activities require further attention?

Interview Comments:

G. LEA Mail Survey Questionnaire

PENNSYLVANIA DEPARTMENT OF EDUCATION
HANDICAPPED PROJECT EVALUATION

Name: ______________________________ Date: ________________

Educational Agency: ____

Program Title: ____

Contract #: ____________________

The purpose of this questionnaire is to provide information to PDE regarding the activities and impacts of vocational education programs for the handicapped. The form should be completed by the person most knowledgeable about your agency's program for the 1981-1982 school year. Please answer the questions as best you can and return the completed form to Tom Biester, Research for Better schools, Inc., 444 North Third Street, Philadelphia, Pennsylvania 19123. (Return envelope enclosed.)

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1. What were the primary goals of your project? (Check all those that apply.)

_____ placement in full/part-time job
_____ acquisition of vocational skills/competencies
_____ development of pre-employment skills
_____ staff development
_____ mainstream into "regular" vocational classes
_____ other: ______________
_____ other: ______________

Briefly describe the primary purpose of the project ____________________
____
____
____
____

2. How many students actually participated in the project during the 1981-1982 school year?

_____ # male _____ # female _____ not appropriate

3. Describe the types of handicaps for those students who participated in the program, indicating the approximate percentage for each type.

Type of Handicap	Percent
______________________________	_____
______________________________	_____
______________________________	_____

4. List the staff assigned to the project by job title and percent assignment.

Title	Percent Time Assigned to Project
____________________	__________
____________________	__________
____________________	__________

5. What activities were conducted by the project? (Check all those that apply.)

_____ specific job skill training
_____ pre-employment services
_____ placement services
_____ evaluation/assessment
_____ competency-based instruction
_____ mainstreamed program
_____ general vocational skills
_____ work experience/coop.
_____ counseling
_____ remedial training
_____ individualized program
_____ self contained program
_____ staff development
_____ other support services
_____ other: ______________
_____ other: ______________

Briefly describe the primary project activities ______________________________
____
____

6. Did you conduct any formal evaluation activities?

____ yes   _____ no

If yes, please describe them briefly ______________________________
____
____

7. What was the overall impact of the project?

If appropriate:

_____ % positive outcomes
_____ % graduates successfully employed
_____ % mainstreamed into "regular" vocational education

Or, please describe other positive impacts (e.g., related to specific goals/objectives of project) ______________________________
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8. Indicate any comments or recommendations for PDE concerning vocational education for the handicapped in Pennsylvania ______________________________
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H. State Goals for Vocational Education

STATE GOALS FOR VOCATIONAL EDUCATION
IN PENNSYLVANIA

The State Board of Education recognizes the increasing complexity and rising costs associated with providing educational services for all citizens of the Commonwealth. It is imperative that: (1) accountability be an integral part of planning; (2) existing and prospective educational programs be monitored and evaluated; (3) outdated and unnecessary duplication of programs and services be eliminated; (4) educators justify their educational expenditures to the public; and (5) representatives of all educational levels participate in determining the optimum delivery system for meeting educational needs of the public. Considering these points and, in an effort to provide a clear direction for vocational educators, the State Board of Education has adopted the following goals to guide vocational education for the next five years.

I. Develop, expand or modify quality vocational education so that by 1982 every public secondary student will have had the opportunity to: (1) enter the labor force with a marketable vocational skill; (2) learn a useful vocational skill; or (3) acquire a basic vocational skill and continue at the postsecondary level.

II. Promote the expansion, range and diversity of adult and postsecondary occupational education opportunities to facilitate: (1) the entry/reentry of persons into the labor force and; (2) to provide upgrading or retraining for persons already employed/unemployed.

III. Encourage alternative forms of vocational/occupational education to broaden the options available to students.

IV. Intensify articulation efforts among programs at middle schools and junior high schools with secondary school and postsecondary vocational/occupational programs.

V. Support a greater understanding of educational/career options by expanding vocational guidance, counseling, and job placement services and providing occupational experiences for students.

VI. Foster a concerted effort to achieve equal educational opportunities by eliminating sex, racial/ethnic and linguistic bias, stereotyping, and discrimination.

VII. Strengthen the development and implementation of comprehensively planned programs to meet the needs of and demands for competent professional vocational teachers, counselors, supervisors, and administrators.

VIII. Develop and expand vocational education opportunities for the disadvantaged and handicapped.